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DUE TO THE QUALITY OF THE ORIGINAL

This SSI received by
Undine 6-7-88 Undine's recommendation
is to approve the SSI

689

DRAFT

SITE SCREENING INSPECTION REPORT
SOUTHEAST TERMINAL
GAD981469281

Charles P. Evans CPE
Georgia Environmental Protection Division

December 1987

Reviewed by: Randolph A Wilson Date: 12/30/87

TABLE OF CONTENTS

SOUTHEAST TERMINAL
SCREENING SITE INSPECTION REPORT

1.0 EXECUTATIVE SUMMARY

Southeast Terminal is located at 5800 St. Elmo Ave., Flintstone, Georgia on the Georgia - Tennessee border. Although physically located in Georgia the site has a Tennessee mailing address. Wastes handeled at the facility include a sludge from the tank cleaning operation and water that accumulates in the bottom of the product storage tanks. Constituents of this waste found in slmples collected at the site include lead, ethyl benzene, and xylene. Resources that may be affected from waste migration from the site are ground water and surface water. Only Ground water has shown to be affected from waste at the site. Nineteen people use ground water as their source of drinking water within three miles of the site. No known regulatory violations have occurred at the facility. The facility is classified as a generator of hazardous waste. A recconnaissance of the facility rvealed that rain water and waste water from the product storage tanks is discharged to a wooded area south east of the site. There is limited use of ground water as a source of drinking water within three miles of the facility. The nearest well is located 1.38 miles south of the facility. I collected six environmental samples on November 5, 1987 in order to characterize migration of the waste from the site.

2.0 ENVIRONMENTAL SETTING

The site is located in the Ridge and Vally physiographic province of Georgia (1)in the Chattanooga vally the terrain slopes gently to the north, south and east but rises sharply to the top of Lookout Mountain to the west(2). The Chattnooga Vally is drained by the Chattanooga Creek which lies 1500 feet to the west of the site. There are no water intakes along the Chattanooga Creek and within three miles of the site. However some fishing occurs on this creek.

The site is underlain by the Mississippian Rocks Undifferentated. These rocks are composed of Pennington Shale, Bangor Limestone, Hartsell Sandstone, Golonda Formation, Gasper Limestone, Ste. Geneve Limestone, and St. louis Limestone(4). The underlying formation is covered by a clayey sand(5) Ground water occupies pore spaces in the residuum and joints and fractures in the rocks underlying the site. The water table is less than twenty feet below the ground's surface at the site(6). Because of the folding and fracturing of the different rock groups within three miles of the site all formations are considered to be hydologicly connected.

The total annual rainfall in the area is 52 inches / year. The mean annual lake evaporation is 37 inches / year. The net rainfall is therefore 15 inches / year(7).

Land to the north of the site is urbanized. The most common use

is residential. The area to the south is densely developed. The major use is farms and residential. the heavest population density is to the north in Hamilton County Tennessee. The area to the south is rural.
Most homes within three miles of the site use municipal water from the Walker County water system or the Tennessee - American Water System in Chattanooga Tennessee. Five households within three miles of the site use ground water as their source of drinking water(6).
There are no critical environments of an endangered species within three miles of the site(8).

3.0 TARGETS POPULATION

Ground water and surface water are the major pathways of concern. Five homes within three miles of the site use ground water as their source of drinking water. The population served by ground water is thus nineteen people. There are no water intakes within three miles and downstream of the hazardous substances detected on-site. there is some fishing activity in this area.

4.0 WASTE TYPES AND QUANTITIES

Contaminates detected at the site include lead, ethyl benzene, and xylene. the quantity of waste at the site is unknown(9).

5.0 LABORATORY DATA

I collected six environmental samples from the area around the site. Lead was present in signifiant quantities (X 10) above background in soil from the Union Oil and Standard Oil product storage areas and in the composit soil sample collected from the drainage areas south east of the facility(9).

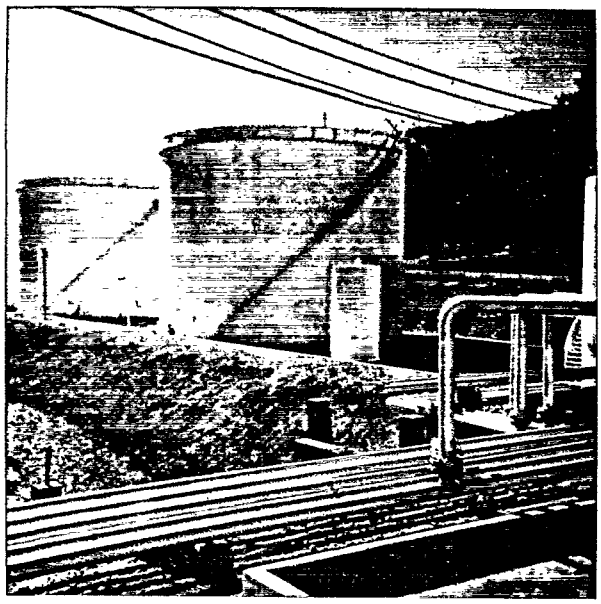
6.0 TOXICOLOGY/CHEMICAL CHARACTERISTICS

Ethyl benzene - oral-rat, LD50 - 3500 mg/kg, an irritant to skin and mucous membrane, tolerance (air) - 100 ppm.

Lead - oral-rat, lowest toxic dose reported - 790 mg/kg, an indefinite carcinogen, tolerance (air) - 0.15 mg/m3.

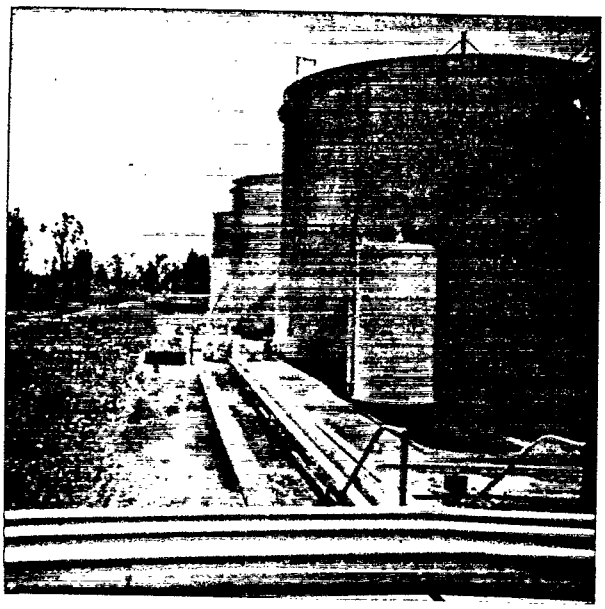
Xylene - oral-rat, lowest toxic dose reported - 4300 mg/kg, a human eye irritant, tolerance (air) - 100 ppm.

APPENDIX A



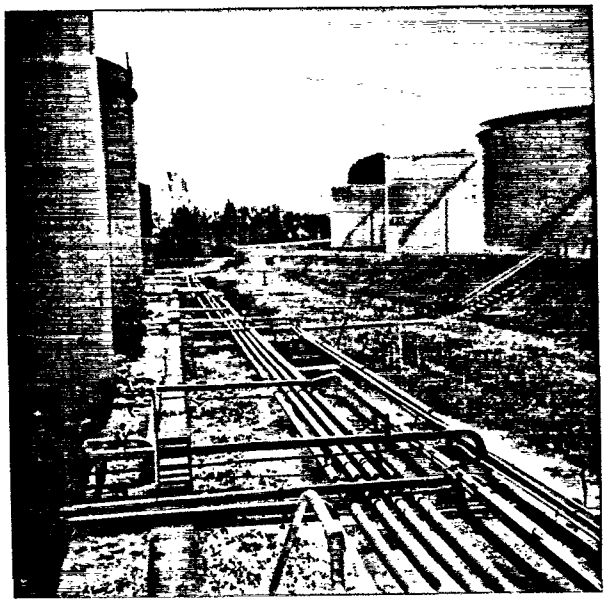
UNION OIL TANK AREA

County Name WALKER
Picture No. 1 of 6
Site Name SOUTHEAST TERMINAL
Date 11/5/87 Weather CLEAR
Direction Facing SOUTH WEST
Photographer EVANS
Program SITE INVESTIGATION
Explanation UNION OIL TANK AREA
Other



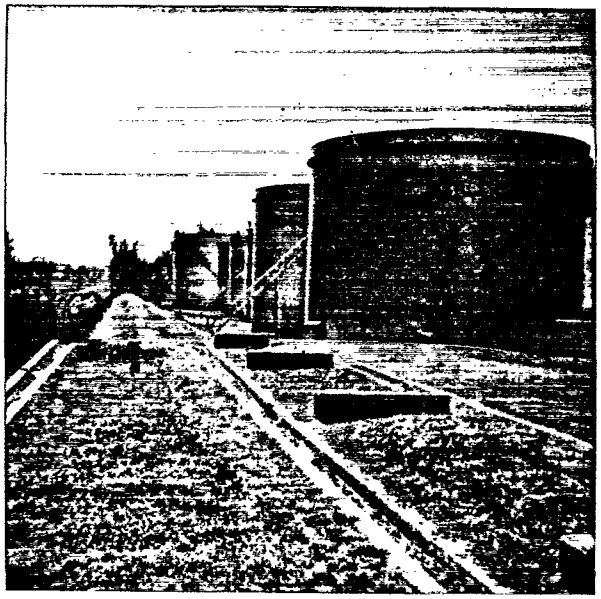
~~GULF~~ OIL TANK AREA
UNION

County Name WALKER
Picture No. 2 of 6
Site Name SOUTHEAST TERMINAL
Date 11/5/87 Weather CLEAR
Direction Facing SOUTH
Photographer EVANS
Program SITE INVESTIGATION
Explanation UNION OIL TANK AREA
Other



GULF OIL TANK AREA

County Name WALKER
Picture No. 3 of 6
Site Name SOUTHEAST TERMINAL
Date 11/5/87 Weather CLEAR
Direction Facing SOUTH
Photographer EVANS
Program SITE INVESTIGATION
Explanation GULF (STANDARD OIL) TANK AREA ON LEFT
Other

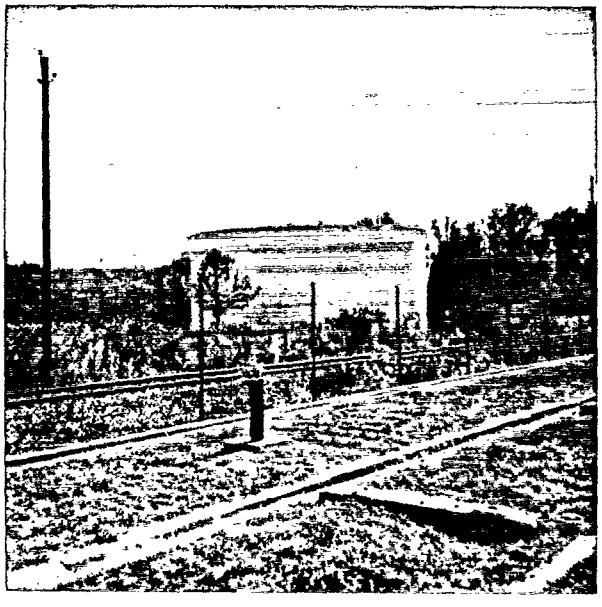


GULF OIL TANK AREA & WELL LM-7

County Name WALKER
Picture No. 4 of 6
Site Name SOUTHEAST TERMINAL
Date 11/5/87 Weather CLEAR
Direction Facing SOUTH
Photographer EVANS
Program SITE INVESTIGATION
Explanation GULF (STANDARD OIL) TANK STORAGE AREA.
Other

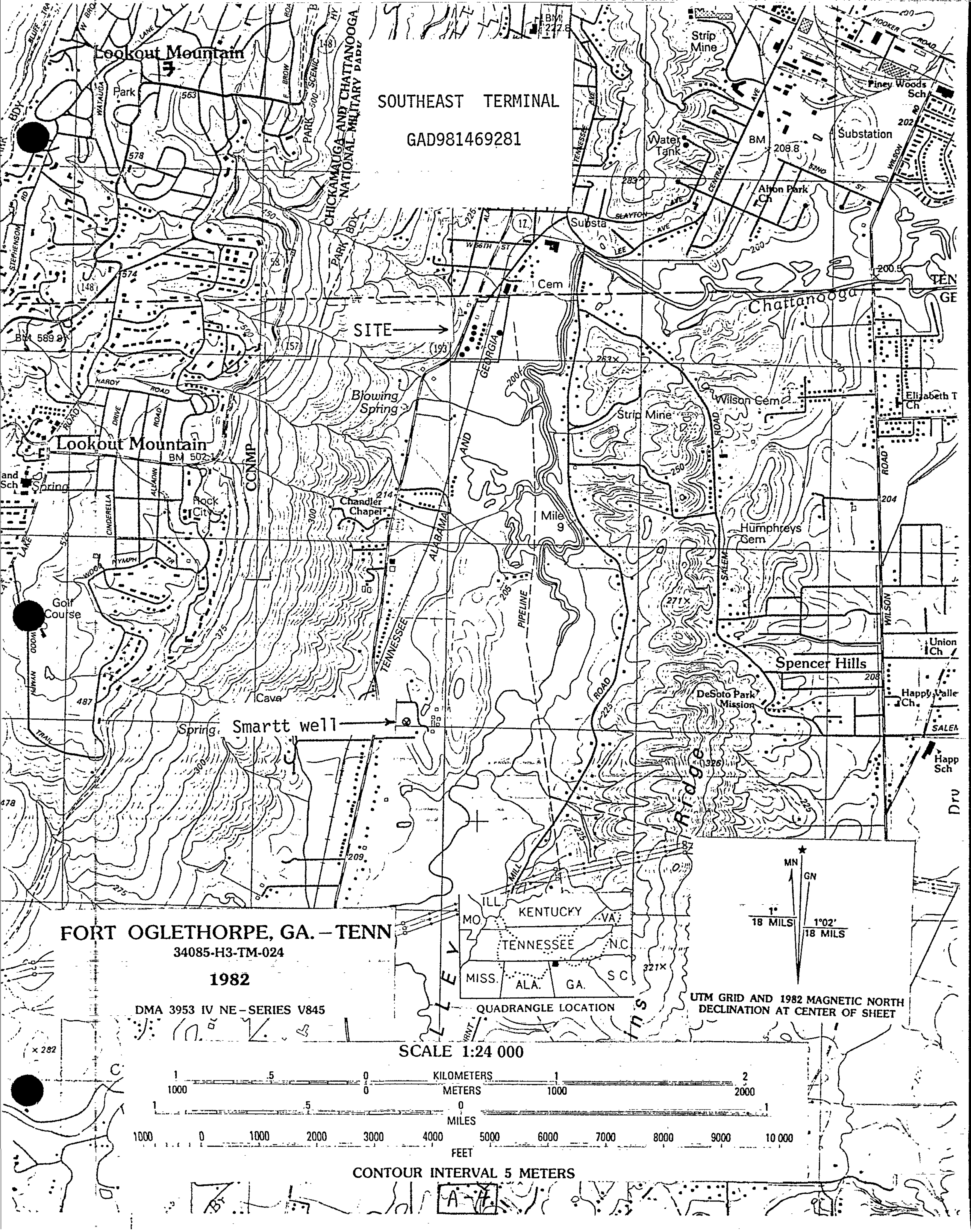
MONITORING WELL # 7

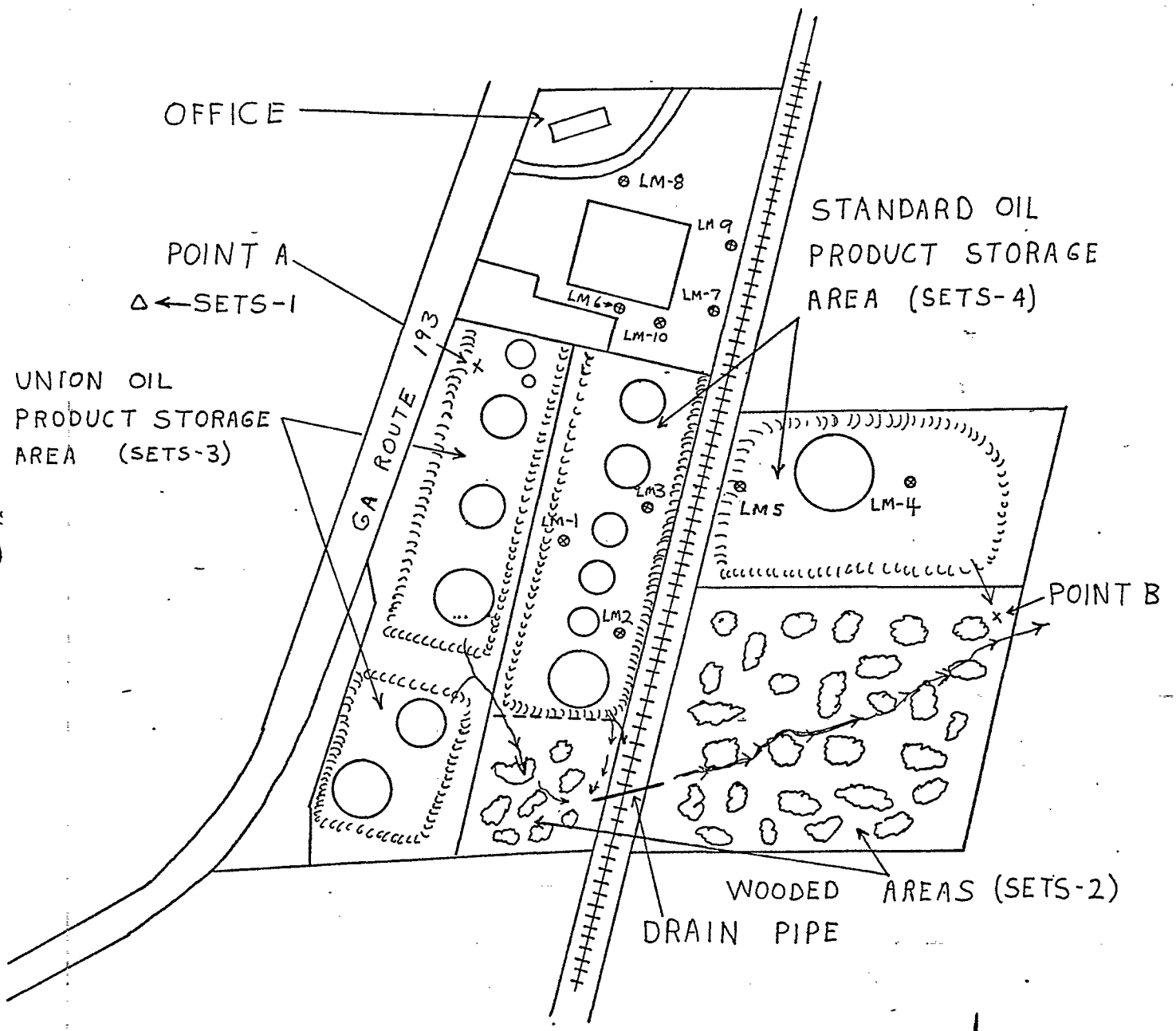
County Name WALKER
Picture No. 5 of 6
Site Name SOUTHEAST TERMINAL
Date 11/5/87 Weather CLEAR
Direction Facing SOUTH
Photographer EVANS
Program SITE INVESTIGATION
Explanation MONITORING WELL LM-7.
Other



GULF OIL LEADED GAS TANK # 113

County Name WALKER
Picture No. 6 of 6
Site Name SOUTHEAST TERMINAL
Date 11/5/87 Weather CLEAR
Direction Facing
Photographer EVANS
Program SITE INVESTIGATION
Explanation GULF (STANDARD OIL) LEADED GASOLINE STORAGE TANK.
Other


SOUTHEAST TERMINAL
GAD981469281
SITE
Smartt well
Lookout Mountain
Park
CHICKAMAUGA AND CHATTANOOGA NATIONAL MILITARY PARK
Strip Mine
Water Tank
Substation
Piney Woods Sch
Alton Park Ch
Substa
Cem
Chattanooga
Blowing Spring
Wilson Cem
Strip Mine
Elizabeth Ch
Lookout Mountain
BM 502.1
CCNMP
Rock City
Chandler Chapel
Mile 9
Humphreys Cem
Golf Course
Spencer Hills
Union Ch
DeSoto Park Mission
Happy Valley Ch
Cave
Spring
PIPELINE
ALABAMA
GEORGIA
TENNESSEE
Ridge
FORT OGLETHORPE, GA.—TENN
34085-H3-TM-024
1982
DMA 3953 IV NE—SERIES V845
KENTUCKY
TENNESSEE
MISS.
ALA.
GA.
QUADRANGLE LOCATION
MN
GN
1°
18 MILS
1°02'
18 MILS
UTM GRID AND 1982 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
SCALE 1:24 000
KILOMETERS
METERS
MILES
FEET
CONTOUR INTERVAL 5 METERS
A-4



SOUTHEASTERN TERMINAL
SITE SKETCH
SCALE 1" = 200'

APPENDIX B

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

LABORATORY REPORT

656 -7904

SAMPLE DATE: 11/5/87 PROJECT: SOUTHEAST TERMINAL COLLECTOR: C. EVANS

HW LOG NO. 2903 2904

DATE REC'D 11-6-87 LABEL SETW-1 SETW-2

TIME REC'D 1400

REC'D BY: D Reed

DEL BY: Evans

OFF-SITE ~~WA~~ GROUND-WATER

ON-SITE GROUND WATER

J Harold Langford
LABORATORY MANAGER

DATE: 12-14-87

PARAMETERS		LAB NO.	HW 2903	HW 2904
Total	Ag	ug/L	<10	<10
"	As	"	<30	<30
"	Ba	"	10	195
"	Cd	"	<10	<10
"	Cr	"	<10	<10
"	Pb	"	<30	<30
"	Se	"	<5	<5
VOA			See Attached Sheets	

REMARKS:

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

LABORATORY REPORT

656-7404

SAMPLE DATE: 11/5/87 PROJECT: SOUTHEAST TERMINAL COLLECTOR: C. EVANS

HW LOG NO.

DATE REC'D 11-6-87 LABEL

TIME REC'D 1400

REC'D BY: DReed

DEL BY: Evans

J. Daniel Sanford
LABORATORY MANAGER

DATE: 12-14-87

PARAMETERS	LAB NO.	HW2905	HW2906	HW2907	HW2908
		SETS-1 OFF-SITE SOIL SAMPLE	SETS-2 DRIANAGE AREA SOIL SAMPLE	SETS-3 SOIL COMPOSITE UNION OIL TANK AREA	SETS-4 SOIL COMPOSITE GULF OIL TANK AREA
% Solids		92.4	63.0	92.5	89.3
Total Ag	mg/kg	<1	<4	<1	<1
" As	"	9.7	12	19	17
" Ba	"	53	415	120	76
" Cd	"	<1	<1	<1	<1
" Cr	"	29	21	27	47
" Pb	"	6.3	71	245	1300
" Se	"	<5	<5	<5	<5
EP Ag	ug/L			<20	<20
" As	"			<60	<60
" Ba	"			1310	570
" Cd	"			<20	<20
" Cr	"			<20	<20
" Pb	"			70	<40
" Se	"			<100	<100
VOA		<5pp Attached Sheets →			

REMARKS:

DATE: 12-11-87 GEORGIA ENVIRONMENTAL PROTECTION DIVISION SAMPLE REC'D (date & time):
PROJECT: Southeast Terminals PURGEABLE ORGANIC ANALYSIS-WATER SAMPLE START (date & time):
SOURCE: W-1 DATA REPORTING SHEET SAMPLE STOP (date & time):
Off-Site Groundwater
SAMPLE TYPE: Water CHEMIST: MB COMPLETE: OK
SAMPLE NO.: HW 2563

Compound	Storet#		Units	Compound	Storet#		Units
Methylene Chloride	34423	< 5	µg/l	Acetone		< 10	µg/l
Trichlorofluoromethane	34488	< 1	µg/l	Methyl Ethyl Ketone		< 10	µg/l
1,1-Dichloroethylene	34501		µg/l	Carbon Disulfide		< 1	µg/l
1,1-Dichloroethane	34496		µg/l				µg/l
1,2-Trans-Dichloro-ethylene	34546		µg/l	Isopropyl Acetate			µg/l
Chloroform	32106		µg/l	2-Hexanone			µg/l
1,2-Dichloroethane	32103		µg/l	Methyl Isobutyl Ketone			µg/l
1,1,1-Trichloroethane	34506		µg/l	Styrene			µg/l
Carbon Tetrachloride	32102		µg/l	O-Xylene			µg/l
Dichlorobromomethane	32101		µg/l	P-Xylene			µg/l
1,2-Dichloropropane	34541		µg/l	M-Xylene			µg/l
Trans-1,3-Dichloro-propene	34699		µg/l	Ethyl Acetate			µg/l
Trichloroethylene	39180		µg/l	n-Propyl Acetate			µg/l
Benzene	34030		µg/l	Butyl Acetate			µg/l
Chlorodibromomethane	34306		µg/l	Acrolein	34210	< 50	µg/l
1,1,2-Trichloroethane	34511		µg/l	Acrylonitrile	34215	< 50	µg/l
Cis-1,3-Dichloropropene	34704		µg/l	Chloromethane	34418	< 10	µg/l
2-Chloroethyl Vinyl Ether	34576			Bromomethane	34413		µg/l
Bromoform	32104		µg/l	Vinyl Chloride	39175		µg/l
1,1,2,2-Tetrachloro-ethane	34516		µg/l	Chloroethane	34311		µg/l
Tetrachloroethylene	34475		µg/l				µg/l
Toluene	34010		µg/l				µg/l
Chlorobenzene	34301		µg/l				µg/l
Ethylbenzene	34371		µg/l				µg/l
							µg/l

B-3

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

M - NOT ANALYZED

No other purgeable organic compound detected with an estimated minimum detection limit of _____

DATE: 12-11-87 GEORGIA ENVIRONMENTAL PROTECTION DIVISION SAMPLE REC'D (date & time):
PROJECT: Southeast Terminals PURGEABLE ORGANIC ANALYSIS-WATER SAMPLE START (date & time):
SOURCE: On-Site DATA REPORTING SHEET SAMPLE STOP (date & time):
Groundwater W-2
SAMPLE TYPE: Water CHEMIST: MB COMPLETE: DK
SAMPLE NO.: HW 2904

Compound	Storet#		Units	Compound	Storet#		Units
Methylene Chloride	34423	<200	µg/l	Acetone		<500	µg/l
Trichlorofluoromethane	34488	<50	µg/l	Methyl Ethyl Ketone		<500	µg/l
1,1-Dichloroethylene	34501		µg/l	Carbon Disulfide		<50	µg/l
1,1-Dichloroethane	34496		µg/l	Vinyl Chloride			µg/l
1,2-Trans-Dichloro-ethylene	34546		µg/l	Isopropyl Acetate 2-Hexanone			µg/l
Chloroform	32106		µg/l	Methyl Isobutyl Ketone			µg/l
1,2-Dichloroethane	32103		µg/l	Styrene			µg/l
1,1,1-Trichloroethane	34506		µg/l	O-Xylene			µg/l
Carbon Tetrachloride	32102		µg/l	P-Xylene } total		253	µg/l
Dichlorobromomethane	32101		µg/l	M-Xylene }			µg/l
1,2-Dichloropropane	34541		µg/l	Ethyl Acetate		<50	µg/l
Trans-1,3-Dichloro-propene	34699		µg/l	n-Propyl Acetate			µg/l
Trichloroethylene	39180		µg/l	Butyl Acetate			µg/l
Benzene	34030		µg/l	Acrolein	34210	<2000	µg/l
Chlorodibromomethane	34306		µg/l	Acrylonitrile	34215	<2000	µg/l
1,1,2-Trichloroethane	34511		µg/l	Chloromethane	34418	<500	µg/l
Cis-1,3-Dichloropropene	34704		µg/l	Bromomethane	34413		µg/l
2-Chloroethyl Vinyl Ether	34576			Vinyl Chloride, Chloroethane	39175		µg/l
Bromoform	32104		µg/l		34311		µg/l
1,1,2,2-Tetrachloro-ethane	34516		µg/l				µg/l
Tetrachloroethylene	34475		µg/l				µg/l
Toluene	34010		µg/l				µg/l
Chlorobenzene	34301		µg/l				µg/l
Ethylbenzene	34371	641	µg/l				µg/l

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

M - NOT ANALYZED

No other purgeable organic compound detected with an estimated minimum detection limit of _____

DATE: 12-14-87 GEORGIA ENVIRONMENTAL PROTECTION DIVISION SAMPLE REC'D (date & time):
PROJECT: Southeast Terminal PURGEABLE ORGANIC ANALYSIS-SEDIMENT SAMPLE START (date & time):
SOURCE: Off-Site DATA REPORTING SHEET SAMPLE STOP (date & time):
Soil Sample
SAMPLE TYPE: Soil CHEMIST: MB COMPLETED: ok
SAMPLE NO.: NW 2905

Compound	Storet#		Units	Compound	Storet#		Units
Methylene Chloride	34426	<5	µg/Kg	Acetone		<10	µg/Kg
Trichlorofluoromethane	34491	<1	µg/Kg	Methy Ehtyl Ketone		<10	µg/Kg
1,1-Dichloroethylene	34504		µg/Kg	Carbon Disulfide		<1	µg/Kg
1,1-Dichloroethane	34499		µg/Kg				µg/Kg
1,2-Trans-Dichloro-ethylene	34549		µg/Kg	Isopropyl Acetate			µg/Kg
				2-Hexanone			µg/Kg
Chloroform	34318		µg/Kg	Methyl Isobutyl Ketone			µg/Kg
1,2-Dichloroethane	34534		µg/Kg	Styrene			µg/Kg
1,1,1-Trichloroethane	34509		µg/Kg	O-Xylene			µg/Kg
Carbon Tetrachloride	34299		µg/Kg	P-Xylene			µg/Kg
Dichlorobromomethane	34330		µg/Kg	M-Xylene			µg/Kg
1,2-Dichloropropane	34544		µg/Kg	Ethyl Acetate			µg/Kg
Trans-1,3-Dichloro-propene	34697		µg/Kg	N-Propyl Acetate			µg/Kg
				Butyl Acetate			µg/Kg
Trichloroethylene	34487		µg/Kg	Acrolein	34213	<50	µg/Kg
Benzene	34237		µg/Kg	Acrylonitrile	34218	<50	µg/Kg
Chlorodibromomethane	34309		µg/Kg	Chloromethane	34421	<10	µg/Kg
1,1,2-Trichloroethane	34514		µg/Kg	Bromomethane	34416		µg/Kg
Cis-1,3-Dichloropropene	34702		µg/Kg	Vinyl Chloride	34495		µg/Kg
2-Chloroethyl Vinyl Ether	34579		µg/Kg	Chloroethane	34314		µg/Kg
							µg/Kg
Bromoform	34290		µg/Kg				µg/Kg
1,1,2,2-Tetrachloro-ethane	44519		µg/Kg				µg/Kg
							µg/Kg
Tetrachloroethylene	34478		µg/Kg				µg/Kg
Toluene	34483		µg/Kg				µg/Kg
Chlorobenzene	34304		µg/Kg				µg/Kg
Ethylbenzene	34374		µg/Kg				µg/Kg

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

No other purgeable organic compound detected with an estimated minimum detection limit of _____

M - NOT ANALYZED

DATE 12-14-87 GEORGIA ENVIRONMENTAL PROTECTION DIVISION SAMPLE REC'D (date & time)
PROJECT: Southeast Terminal PURGEABLE ORGANIC ANALYSIS-SEDIMENT SAMPLE START (date & time):
SOURCE: SETS-2 Drainage Area Soil Sample DATA REPORTING SHEET SAMPLE STOP (date & time):
SAMPLE TYPE: Soil CHEMIST: MB COMPLETED: DR
SAMPLE NO.: HW 2506

Compound	Storet#		Units	Compound	Storet#		Units
Methylene Chloride	34426	< 5	µg/Kg	Acetone		< 10	µg/Kg
Trichlorofluoromethane	34491	< 1	µg/Kg	Methy Ehtyl Ketone		< 10	µg/Kg
1,1-Dichloroethylene	34504		µg/Kg	Carbon Disulfide		< 1	µg/Kg
1,1-Dichloroethane	34499		µg/Kg				µg/Kg
1,2-Trans-Dichloro-ethylene	34549		µg/Kg	Isopropyl Acetate			µg/Kg
Chloroform	34318		µg/Kg	2-Hexanone			µg/Kg
1,2-Dichloroethane	34534		µg/Kg	Methyl Isobutyl Ketone			µg/Kg
1,1,1-Trichloroethane	34509		µg/Kg	Styrene			µg/Kg
Carbon Tetrachloride	34299		µg/Kg	O-Xylene			µg/Kg
Dichlorobromomethane	34330		µg/Kg	P-Xylene			µg/Kg
1,2-Dichloropropane	34544		µg/Kg	M-Xylene			µg/Kg
Trans-1,3-Dichloro-propene	34697		µg/Kg	Ethyl Acetate			µg/Kg
				N-Propyl Acetate			µg/Kg
				Butyl Acetate			µg/Kg
Trichloroethylene	34487		µg/Kg	Acrolein	34213	< 50	µg/Kg
Benzene	34237		µg/Kg	Acrylonitrile	34218	< 50	µg/Kg
Chlorodibromomethane	34309		µg/Kg	Chloromethane	34421	< 10	µg/Kg
1,1,2-Trichloroethane	34514		µg/Kg	Bromomethane	34416		µg/Kg
Cis-1,3-Dichloropropene	34702		µg/Kg	Vinyl Chloride	34495		µg/Kg
2-Chloroethyl Vinyl Ether	34579		µg/Kg	Chloroethane	34314		µg/Kg
							µg/Kg
Bromoform	34290		µg/Kg				µg/Kg
1,1,2,2-Tetrachloro-ethane	44519		µg/Kg				µg/Kg
							µg/Kg
Tetrachloroethylene	34478		µg/Kg				µg/Kg
Toluene	34483		µg/Kg				µg/Kg
Chlorobenzene	34304		µg/Kg				µg/Kg
Ethylbenzene	34374		µg/Kg				µg/Kg

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

No other purgeable organic compound detected with an estimated minimum detection limit of _____

M - NOT ANALYZED

DATE: 12-11-87

PROJECT: Southeast Terminal

SOURCE: Soil Composite Union Oil Tank Area

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
PURGEABLE ORGANIC ANALYSIS-SEDIMENT
DATA REPORTING SHEET

SAMPLE REC'D (date & time): _____

SAMPLE START (date & time): _____

SAMPLE STOP (date & time): _____

SAMPLE TYPE: Soil

SAMPLE NO.: HW2907

CHEMIST: MB COMPLETED: DR

Compound	Storet#		Units
Methylene Chloride	34426	<5	µg/Kg
Trichlorofluoromethane	34491	<1	µg/Kg
1,1-Dichloroethylene	34504		µg/Kg
1,1-Dichloroethane	34499		µg/Kg
1,2-Trans-Dichloroethylene	34549		µg/Kg
Chloroform	34318		µg/Kg
1,2-Dichloroethane	34534		µg/Kg
1,1,1-Trichloroethane	34509		µg/Kg
Carbon Tetrachloride	34299		µg/Kg
Dichlorobromomethane	34330		µg/Kg
1,2-Dichloropropane	34544		µg/Kg
Trans-1,3-Dichloropropene	34697		µg/Kg
Trichloroethylene	34487		µg/Kg
Benzene	34237		µg/Kg
Chlorodibromomethane	34309		µg/Kg
1,1,2-Trichloroethane	34514		µg/Kg
Cis-1,3-Dichloropropene	34702		µg/Kg
2-Chloroethyl Vinyl Ether	34579		µg/Kg
Bromoform	34290		µg/Kg
1,1,2,2-Tetrachloroethane	44519		µg/Kg
Tetrachloroethylene	34478		µg/Kg
Toluene	34483		µg/Kg
Chlorobenzene	34304		µg/Kg
Ethylbenzene	34374		µg/Kg

Compound	Storet#		Units
Acetone		<10	µg/Kg
Methy Ehtyl Ketone		<10	µg/Kg
Carbon Disulfide		<1	µg/Kg
			µg/Kg
Isopropyl Acetate			µg/Kg
2-Hexanone			µg/Kg
Methyl Isobutyl Ketone			µg/Kg
Styrene			µg/Kg
O-Xylene			µg/Kg
P-Xylene			µg/Kg
M-Xylene			µg/Kg
Ethyl Acetate			µg/Kg
N-Propyl Acetate			µg/Kg
Butyl Acetate			µg/Kg
Acrolein	34213	<50	µg/Kg
Acrylonitrile	34218	<50	µg/Kg
Chloromethane	34421	<10	µg/Kg
Bromomethane	34416		µg/Kg
Vinyl Chloride	34495		µg/Kg
Chloroethane	34314		µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

No other purgeable organic compound detected with an estimated minimum detection limit of _____

M - NOT ANALYZED

DATE: 12-11-87

PROJECT: Southeast Terminal

SOURCE: Soil Composite Gulf Oil Tank Area

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
PURGEABLE ORGANIC ANALYSIS-SEDIMENT
DATA REPORTING SHEET

SAMPLE REC'D (date & time):
SAMPLE START (date & time):
SAMPLE STOP (date & time):

SAMPLE TYPE: Soil
SAMPLE NO.: HW 2908

CHEMIST: MB COMPLETED: DK

Compound	Storet#		Units	Compound	Storet#		Units
Methylene Chloride	34426	<5	µg/Kg	Acetone		<10	µg/Kg
Trichlorofluoromethane	34491	<1	µg/Kg	Methy Ehtyl Ketone		<10	µg/Kg
1,1-Dichloroethylene	34504		µg/Kg	Carbon Disulfide		<1	µg/Kg
1,1-Dichloroethane	34499		µg/Kg				µg/Kg
1,2-Trans-Dichloro-ethylene	34549		µg/Kg	Isopropyl Acetate			µg/Kg
				2-Hexanone			µg/Kg
Chloroform	34318		µg/Kg	Methyl Isobutyl Ketone			µg/Kg
1,2-Dichloroethane	34534		µg/Kg	Styrene			µg/Kg
1,1,1-Trichloroethane	34509		µg/Kg	O-Xylene			µg/Kg
Carbon Tetrachloride	34299		µg/Kg	P-Xylene			µg/Kg
Dichlorobromomethane	34330		µg/Kg	M-Xylene			µg/Kg
1,2-Dichloropropane	34544		µg/Kg	Ethyl Acetate			µg/Kg
Trans-1,3-Dichloro-propene	34697		µg/Kg	N-Propyl Acetate			µg/Kg
				Butyl Acetate			µg/Kg
Trichloroethylene	34487		µg/Kg	Acrolein	34213	<50	µg/Kg
Benzene	34237		µg/Kg	Acrylonitrile	34218	<50	µg/Kg
Chlorodibromomethane	34309		µg/Kg	Chloromethane	34421	<10	µg/Kg
1,1,2-Trichloroethane	34514		µg/Kg	Bromomethane	34416		µg/Kg
Cis-1,3-Dichloropropene	34702		µg/Kg	Vinyl Chloride	34495		µg/Kg
2-Chloroethyl Vinyl Ether	34579		µg/Kg	Chloroethane	34314		µg/Kg
							µg/Kg
Bromoform	34290		µg/Kg				µg/Kg
1,1,2,2-Tetrachloro-ethane	44519		µg/Kg				µg/Kg
							µg/Kg
Tetrachloroethylene	34478		µg/Kg				µg/Kg
Toluene	34483		µg/Kg				µg/Kg
Chlorobenzene	34304		µg/Kg				µg/Kg
Ethylbenzene	34374		µg/Kg				µg/Kg

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

No other purgeable organic compound detected with an estimated minimum detection limit of _____

M - NOT ANALYZED

APPENDIX C

RECORD OF TELEPHONIC CONVERSATION

Site Investigation Program

Routing: _____ Date: 9/21/87

_____ Time: 11:00 a.m./~~p.m.~~

File: SOUTHEAST TERMINAL, CAD 981469281

Party Spoken To: FRED C. MILLS Title: ENVIRONMENTAL SUPERVISOR

Agency/Company: UNION OIL COMPANY OF CALIFORNIA

Address: 13 CORPORATE SQUARE N.E. City: ATLANTA

Telephone Number: (404) 321 - 7600 State/Zip: GA 30302

Subject: WASTE HANDELING PRACTICES

Summary of Call: I ~~DISC~~ DISCUSSED THE PAST WASTE HANDELING PRACTICES OF SOUTHEAST TERMINAL 5800 ST ELMO AVE, CHATTANOOGA, TN. THE FOLLOWING INFORMATION WAS OBTAINED:

(1) PETROLEUM PRODUCTS ARE SHIPPED TO THE SITE VIA PIPELINE AND DISTRIBUTED BY TRUCK TO OTHER LOCATIONS.

(2) FUELS HANDELED AT THE FACILITY INCLUDED LEADED GASOLINE.

(3) THE FACILITY HAS BEEN IN OPERATION SINCE ABOUT 1941. THE STORAGE TANKS ARE CLEANED ON AN AS NEEDED BASIS, ABOUT EVERY 5-10 YEARS. THE AMOUNT OF WASTE (over)

Actions Required: _____

_____

_____

Signature: _____

Follow-up Responses/Additional Comments: _____

_____

_____

_____

Signature: _____ Date: _____

GENERATED FROM A TYPICAL CLEANING OPERATION RANGES FROM 2,500 TO 3150 GALLONS.

④ MR. MILLS HAD NO KNOLEDGE of ANY PAST SPILLS AT THE FACILITY.

⑤ SURFACE RUN-OFF FROM THE LOADING PAD IS COLLECTED IN AN OIL-WATER SEPARATOR, THE LIGHT PETROLEUM FRACTION OF THE RUN-OFF IS PUMPED INTO AN UNDERGROUND STORAGE TANK. THE LIGHT OILS ON THE SURFACE of THIS TANK ARE NORMALLY TRANSFERED TO A TANK of REGULAR GASOLINE.

⑥ ACCORDING TO MR MILLS THE FACILITY IS NOW CLASSIFIED AS A GENERATOR of HAZARDOUS WASTE.

⑦ THE FACILITY IS JOINTLY OWNED BY UNION OIL COMPANY of CALFORNIA AND BP OIL COMPANY. THE SITE IS OPERATED BY UNION OIL COMPANY of CALFORNIA.

TRIP REPORT
OCTOBER 20, 1987

SITE NAME AND LOCATION:	Southeast Terminal
EPA ID NUMBER:	GAD981469281
COUNTY:	WALKER
TRIP BY:	Charles P. Evans Environmental Specialist Site Investigation Program
ACCOMPANIED BY:	None
DAY AND TIME OF INVESTIGATION:	October 14, 1987 8:00 a.m. - 2:00 p.m.
OFFICALS CONTACTED:	Ken Walton Terminal Manager 5800 St. Elmo Ave. Flintstone, Georgia 30275 (404) 448-0930 Walter Irwin Public Health Sanitarian Walker County Health Dept. 1430 Suggs Street Rossville, Georgia 30726 (404) 866-3122
REFERENCE:	Preliminary Assessment Southeast Terminal October 8, 1987

COMMENTS:
I conducted a reconnaissance of the site on October 13, 1987 to identify potential sampling points at the facility. I obtained the following information:

1. The facility is managed by Union Oil Company of California. However, one section is owned by Standard (Gulf) Oil Company of Ohio and the remainder of the facility is owned by Union Oil Company of Calfornia.

2. Spillage and surface run-off water from the truck loading area is collected and sent to the facilities oil-water

separateor.

3. Berms surround the product storage area to control run-on water. Rain water falling iside the berms is discharged through valves or pumps to a low area southwest of the facility.

4. The product storage tanks at the facility are cleaned, at irregular intervals, of a sludge that accumulates in the tanks. Some loss of this sludge is expected to have occurred in the past.

5. Water accumulates inside the product storage tanks. Because of the difference in the density of water and petroleum the water settles to the bottom of the tanks. Routinely excess water is discharge to the surface, within the bermed area, through valves at the bottom of the tanks.

6. The water fraction from the oil-water separator is discharged to the surface in the bermed area of the Standard Oil Product Area.

7. There is no linner in the berm areas to pevent leaching into the ground water. Due to these two practices some waste is assumed to have been lost at the facility.

8. The product storage area is inside a locked fence. Access to the area is controled.

9. The monitoring wells have been installed on the facility to detect the presence of free product on the water table.

I conducted a well survey in the area in order to characterize the use of ground water for drinking purposes. The following information was obtained:

10. Few homes within three miles of the site use ground water as a source of drinking water. Five homes that use ground water for their source of drinking water are located within three miles of the site.

11. The closest well to the site is located at the home of Mr. J. Polk Smartt, Rt. 1, Box 31, Flintstone, Georgia 30725. This well is a six inch drilled well 365 feet deep.

12. Mr. Smartt's well is located 1.38 miles south of the site.

CONCLUSIONS:
Soil around the site may be contaminated with lead additives to the fuels stored there.

RECOMMENDATIONS AND FOLLOW-UP REQUIRED:
Proceed with sampling of the facility.

PHOTOGRAPHS:
None

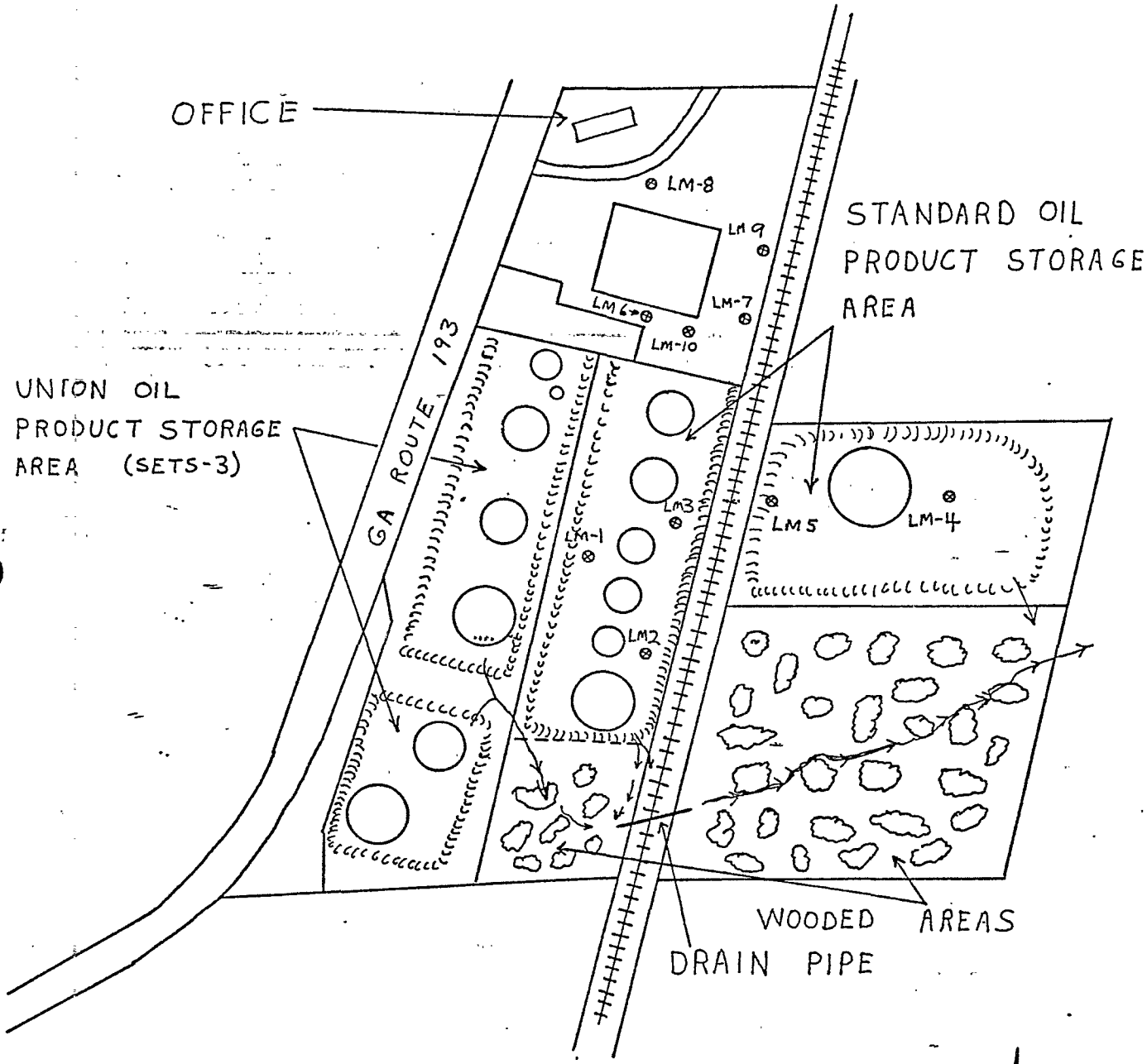
NUMBER OF WASTE/ENVIRONMENTAL SAMPLES TAKEN:
None

REVIEWED BY:_____ DATE:_____

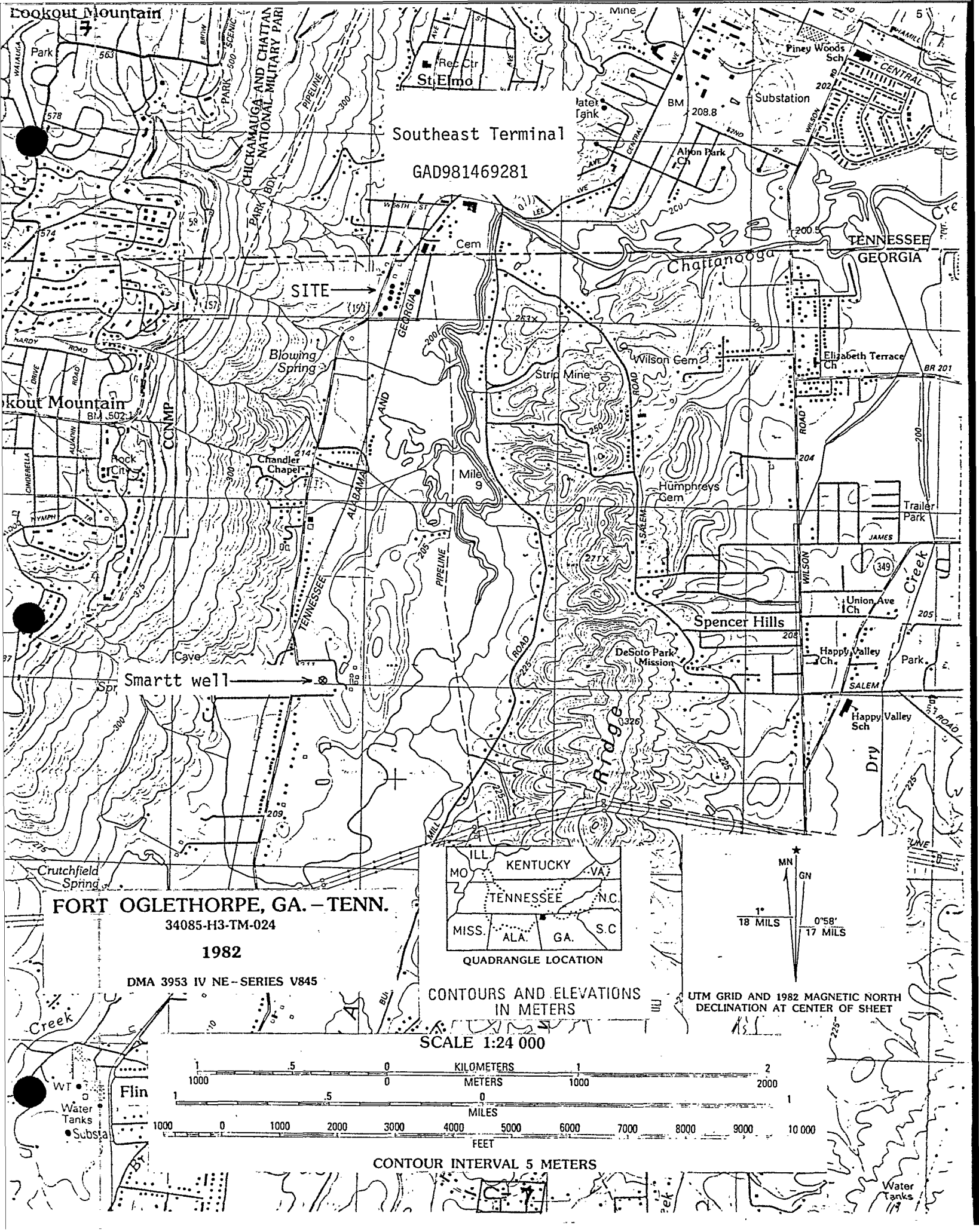
ATTACHMENTS: SITE LOCATION MAP
SITE SKETCH

CPE/cpe

CC: Southeast Terminal
GAD981469281



SOUTHEASTERN TERMINAL
SITE SKETCH
SCALE 1" = 200'



FORT OGLETHORPE, GA.–TENN.

34085-H3-TM-024

1982

DMA 3953 IV NE–SERIES V845

Georgia Department of Natural Resources
205 Butler Street, S.E., Floyd Towers East, Atlanta, Georgia 30334
J. Leonard Ledbetter, Commissioner
Harold F. Reheis, Assistant Director
Environmental Protection Division

TRIP REPORT

November 12,1987

Site Name and Location:	Southeast Terminal 5800 St. Elmo Ave. Flintstone, GA 30725
EPA I.D. Number:	GAD981469281
County:	Walker
Trip By:	Charles P. Evans Environmental Specialist Site Inverstigation Program
Accompanied By:	John O. Costello Environmental Specialist Site Investigation Program
Date and Time of Investigation:	November 4, 1987 2:30 p.m. - 5:00 p.m. November 5, 1987 8:30 a.m. - 2:30 p.m.
Officals Contacted:	Jim Bass Manager, Safety and Environmental Control Southern Division UNOCAL Corporation 13 Corporate Square N.E. P.O. Box 4147 Atlanta, GA 30302 (404) 321-7600 R. E. Van Deusen Manager, Southern Terminal Southern Division UNOCAL Corporation 3805 Presidental Parkway Atlanta, GA 30340 (404) 451-9203 Ken Walton Southeast Terminal 5800 St. Elmo Ave. Flintstone, Ga 30725 (404) 820-0826

David Brown
Southeast Terminal
5800 St. Elmo Ave.
Flintstone, Ga 30725
(404) 820-0826

Reference: Trip Report
Southeast Terminal
Flintstone, GA 30725
October 20, 1987

Comments:
I sampled the atmosphere in the monitoring wells on-site with an H-NU photoionizer to detect the presence of petroleum constituents in the ground water. I obtained the following results:

Well	Reading
LM-1	26 ppm
LM-2	1 ppm
LM-3	8.5 ppm
LM-4	0.5 ppm
LM-5	28 ppm
LM-6	140 ppm
LM-7	280 ppm
LM-8	1 ppm
LM-9	140 ppm
LM-10	60 ppm

The readings were highest in well number seven LM-7. Well seven was then bailed dry to prepare it for sampling. This area is reported to be an old rail car loading area. All wells are six inches in diameter with a PVC casing.
Information on the water level was obtained from Terminal personnel. The following readings were obtained on 11/3/87:

Well	Depth to Water from Top of Casing (ft.)	Casing Height Above Land Surface (ft.)	Depth to Water from Ground Surface (ft.)
LM-1	7.5	4.45	3.05
LM-2	7.25	4.05	3.21
LM-3	7.08	4.13	2.95
LM-4	5.5	2.71	2.79
LM-5	9.58	4.3	5.28
LM-6	15.42	2.0	13.42
LM-7	16.25	1.58	14.67
LM-8	18.58	3.42	15.16
LM-9	18.57	2.54	15.63
LM-10	14.25	0.25	14.00

I collected the following environmental samples on 11/5/87.

Sample Code	Location	Type of Sample
SETS-1	500 feet west and upslope of the site	Background soil sample
SETS-2	Drainage area of the site	Composite soil
SETS-3	Union Oil Co. product storage area	Composite soil
SETS-4	Standard Oil Co. product storage area	Composite soil
SETW-1	Off-Site well	Ground water
SETW-2	On-Site monitoring well (LM-7)	Ground water

All soil samples were collected at the surface. The area around the product tank clean-outs and drains was sampled to reflect a worst case condition.

CONCLUSIONS:
Pending laboratory data.

RECOMMENDATIONS AND FOLLOW-UP REQUIRED:
Complete HRS ranking of the site.

Photographs:
None

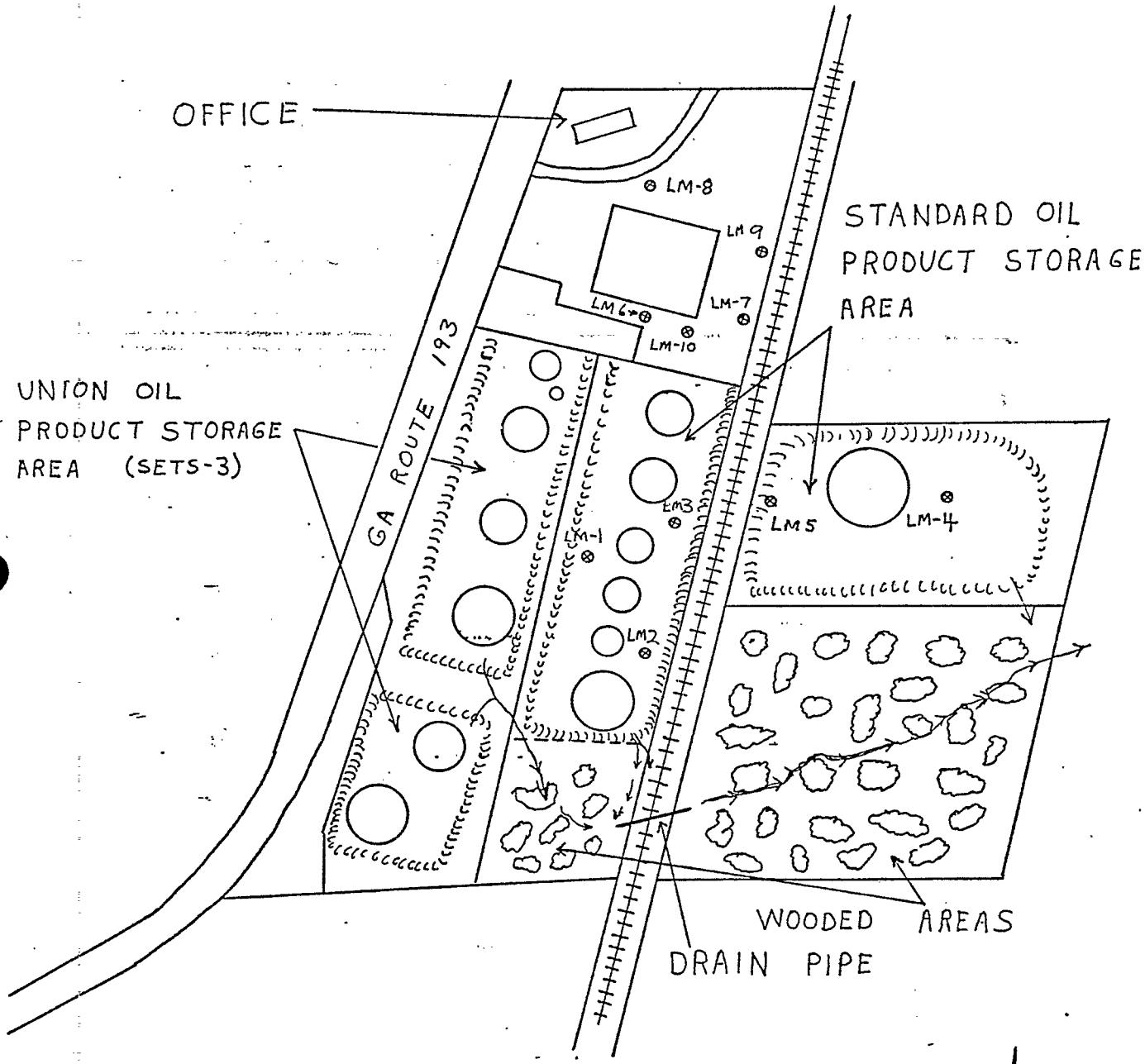
NUMBER OF WASTE/ENVIRONMENTAL SAMPLES TAKEN:
Six

REVIEWED BY: DATE:

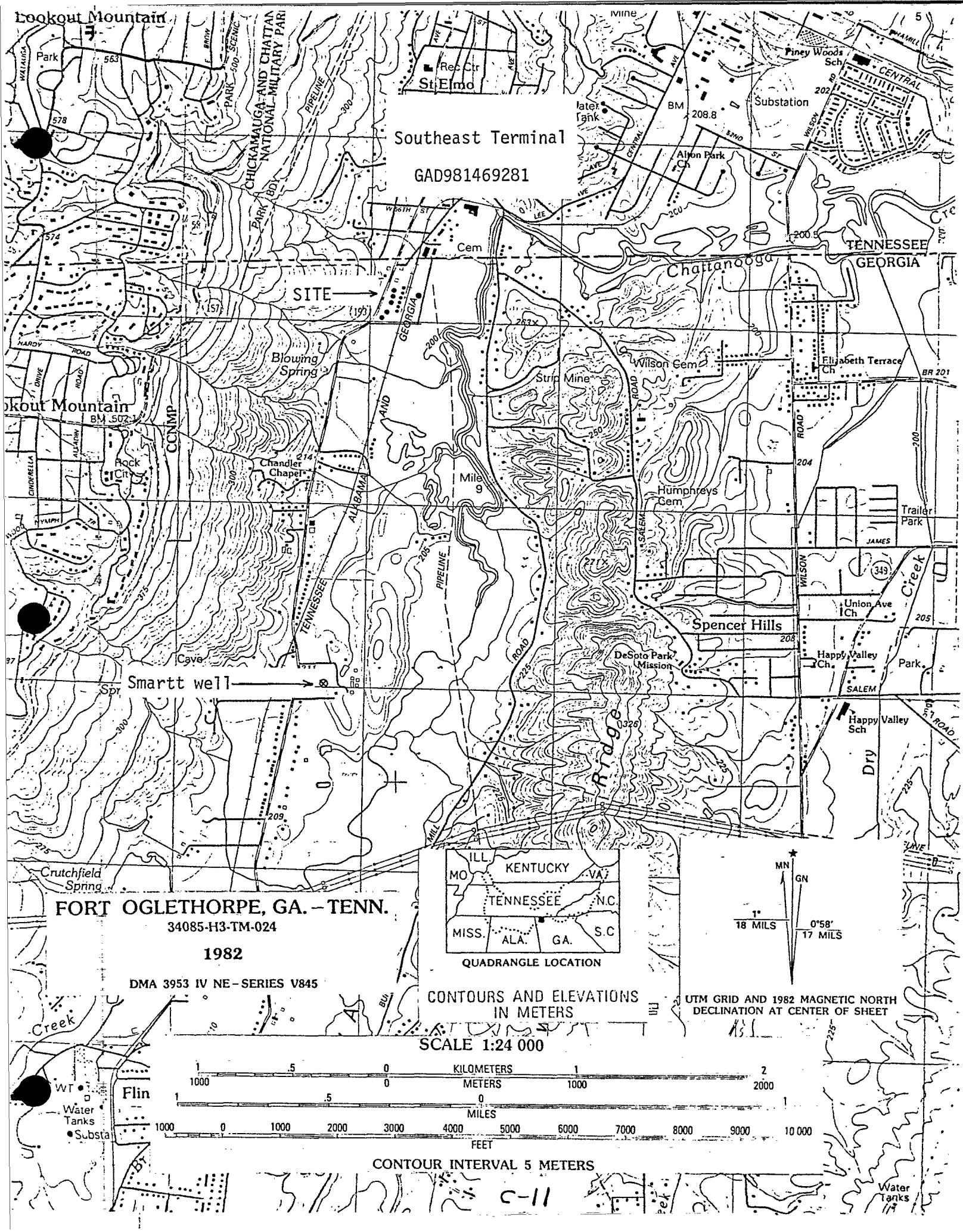
ATTACHMENTS: SITE LOCATION MAP
SITE SKETCH

CPE/cpe

cc:Southeast Terminal
GAD981469281



SOUTHEASTERN TERMINAL
SITE SKETCH
SCALE 1"= 200'


Southeast Terminal
GAD981469281
SITE
Smartt well
FORT OGLETHORPE, GA. – TENN.
34085-H3-TM-024
1982
DMA 3953 IV NE – SERIES V845
QUADRANGLE LOCATION
CONTOURS AND ELEVATIONS IN METERS
UTM GRID AND 1982 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
SCALE 1:24 000
KILOMETERS
METERS
MILES
FEET
CONTOUR INTERVAL 5 METERS
Lookout Mountain
Chattanooga
TENNESSEE
GEORGIA
St Elmo
Rec Ctr
Substation
Piney Woods Sch
Alton Park Ch
Cem
Blowing Spring
Strip Mine
Wilson Cem
Elizabeth Terrace Ch
Rock City
Chandler Chapel
Mile 9
Humphreys Cem
Trailer Park
Union Ave Ch
Spencer Hills
DeSoto Park Mission
Happy Valley Ch
Happy Valley Sch
Park
Cave
Crutchfield Spring
Dry Creek
Ridge
Water Tanks
Substa
Flin
Water Tanks
MN
GN
1° 18 MILS
0°58' 17 MILS
ILL.
KENTUCKY
VA.
MO.
TENNESSEE
N.C.
MISS.
ALA.
GA.
S.C

C-11

APPENDIX D

REFERENCES

1. Clark, William Z., et al., Georgia Department of Natural Resources, Georgia Geologic Survey, Physiographic Map of Georgia, 1976.

2. United States Geological Survey, Fort Oglethorpe, Georgia.-Tennessee and Hooker, Georgia-Tennessee Quadrangles; Scale 1:24,000, 1982.

3. Primmer, Kim; Regional Supervisor, Georgia Department of Natural Resources, Game and Fish Division, Record of Telephonic Conversation with Charles P. Evans, Georgia Environmental Protection Division, April 17, 1987.

4. Cressler, Charles W., Geology and Ground-Water Resources of Walker County, Georgia, Environmental Protection Division, Georgia Geologic Survey, 1981.

5. Evans, Charles P.; Georgia Environmental Protection Division; Trip Report-Southeast Terminal, Flintstone, GA November 12, 1987.

6. Evans, Charles P.; Georgia Environmental Protection Division; Trip Report-Southeast Terminal, Flintstone, GA, October 20, 1987.

7. Unites States Department of Commerce, Rainfall Frequency Atlas of the United States, Technical Paper Number 40, United States Government Printing Office, Washington, D. C., 1979

8. United States Department of The Interior; Fish and Wildlife Service; Region Four Endangered Species Notebook; August 23, 1985.

9. Laboratory Report,.Georgia Enviropmental Protection Division, Southeast Terminal, November 5, 1987.

10. Sax, N. I.; Dangerous Properties of Industrial Materials, 6th ed.; Van Nostrand Reinhold, 1984.

APPENDIX E

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D981469281

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
SOUTHEAST TERMINAL	5800 ST. ELMO AVE.

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
FLINTSTONE	GA	30725	WALKER	295	07

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
34° 58' 55.4"	085° 20' 00.0"	☒ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
11 / 87 (MONTH DAY YEAR)	☒ ACTIVE ☐ INACTIVE	1941 (BEGINNING YEAR) / PRESENT (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☒ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
CHARLES P. EVANS	ENVIRONMENTAL SPECIALIST		(404) 656-7404
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
JOHN COSTELLO	ENVIRONMENTAL SPECIALIST		(404) 656-7404
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
KEN WALTON	TERMINAL MANAGER	5800 ST ELMO AVE CHATTANOOGA, TN 37409	(404) 820-0826
JIM BASS	ENVIRONMENTAL MANAGER	13 CORPORATE SQ NE ATLANTA, GA 30302	(404) 321-7600
R.E. VAN DEUSEN	DIVISION MANAGER	3805 PRESIDENTIAL PARKWAY ATLANTA, GA 30340	(404) 451-9203
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	8:30 AM – 2:30 PM	CLEAR

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
JIM BASS	UNOCAL CORPORATION 13 CORPORATE SQUARE NE, ATLANTA, GA.	(404) 321-7600

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
CHARLES P. EVANS	DNR	GA EPD	(404) 656-7400	12, 30, 87 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D98146928

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☒ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS UNKNOWN
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	UNKNOWN	NA	
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	UNKNOWN	NA	
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SLU	LEAD	7439921	PL	1300	mg/KG
OCC	ETHYL BENZENE	100414	PL	641	ug/L
OCC	XYLENE (TOTAL)	1330207	PL	253	ug/L

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

GA EPD SITE INVESTIGATION PROGRAM FILE "SOUTHEAST TERMINAL GAD 981469281"

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D981469281

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 11/5/87.) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

ETHYL BENZENE + XYLENE WERE DETECTED IN THE GROUND WATER IN AN ON-SITE MONITORING WELL.

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

NA

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

NA

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

NA

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

NA

01 ☐ F. CONTAMINATION OF SOIL — 02 ☒ OBSERVED (DATE: 11/5/87) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 17 (Acres) 04 NARRATIVE DESCRIPTION

LEAD WAS DETECTED IN THE PRODUCT STORAGE AREA AND THE SITE DRAINAGE AREA.

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

GROUND WATER IS USED AS A SOURCE OF DRINKING WATER WITHIN THREE MILES OF THE SITE

01 ☒ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

WORKERS AT THE FACILITY ARE EXPOSED TO CONTAMINATED SOIL

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

NA

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D981469281

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*

NA

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES — 02 ☒ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
(Spills, Runoff, Standing liquids, Leaking drums)
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

RAIN WATER IS DRAINED FROM THE PRODUCT STORAGE AREA TO A NEARBY LOW AREA

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

NA

III. TOTAL POPULATION POTENTIALLY AFFECTED: 19

IV. COMMENTS

NONE

V. SOURCES OF INFORMATION *(Cite specific references e.g., state files, sample analysis, reports)*

GEORGIA ENVIRONMENTAL PROTECTION DIVISION, SITE INVESTIGATION PROGRAM "SOUTHEAST TERMINAL, FLINSTONE, GA"

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D981469281

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES	NA			
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☒ B. PILES	UNKNOWN	
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER

- ☒ A. BUILDINGS ON SITE

06 AREA OF SITE

17.79 (Acres)

07 COMMENTS

NA

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☒ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

RAIN WATER IS PUMPED / DRAINED FROM AREAS OF CONTAMINATED SOIL.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

GA EPD SITE INVESTIGATION PROGRAM FILE " SOUTHEAST TERMINAL GAD 981469 281

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D 981469281

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ☐	B. ☐	A. ☐	B. ☐	C. ☐	A. _____ (mi)
NON-COMMUNITY	C. ☐	D. ☒	D. ☐	E. ☐	F. ☒	B. 1.38 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ☒ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 19

03 DISTANCE TO NEAREST DRINKING WATER WELL 1.38 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
2.79 (ft)	UNKNOWN	UNKNOWN (ft)	UNKNOWN (gpd)	☒ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

PRIVATE WELLS IN THE AREA ARE DEEP DRILLED WELLS. THE CLOSEST WELL IS 1.38 MILES SOUTH OF THE SITE.

10 RECHARGE AREA		11 DISCHARGE AREA	
☒ YES ☐ NO	COMMENTS: RAIN WATER IS EXPECTED TO RECHARGE THE WATER TABLE IN THE AREA	☐ YES ☒ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
CHATTANOOGA CREEK	☐	0.28 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 347 NO. OF PERSONS	B. 1387 NO. OF PERSONS	C. 3123 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: 0.19 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
2200	0.02 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

THE SITE IS LOCATED IN GEORGIA ON THE GEORGIA-TENNESSEE BOUNDRY. THE POPULATION AROUND THE SITE IS MOST DENSE NORTH OF THE SITE IN THE COMMUNITY OF ST. ELMO IN TENNESSEE. THE POPULATION TO THE SOUTH, IN GEORGIA, IS LESS DANSE, MOSTLY RURAL.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	GAD981469281

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☒ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☒ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
UNKNOWN (ft)	UNKNOWN (ft)	UNKNOWN	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
15 (in)	3.25 (in)	1.86 %	EAST	0.55 %

09 FLOOD POTENTIAL: NA
SITE IS IN _____ YEAR FLOODPLAIN

10 NA
☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum) NA
ESTUARINE OTHER
A. _____ (mi) B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)
NA _____ (mi)
ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS; FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 0.02 (mi)	B. 0.19 (mi)	C. _____ (mi)	D. 1.33 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is located on the western side of the Chattanooga valley. The terrain slopes gently to the east to the Chattanooga creek. The ~~slop~~ terrain rises very sharply to the west to the top of Lookout mountain.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

GA EPD Site Investigation Report - Southeast Terminal
GAD981469281

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D981469281

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	2	EPD LABORATORY	12/14/87
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	4	EPD LABORATORY	12/14/87
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
WATER TABLE	AT THE CLOSEST POINT TO THE WATER TABLE FROM THE GROUND SURFACE IS 2.79 FEET

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☒ AERIAL

02 IN CUSTODY OF GA EPD
(Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS GA EPD, SITE INVESTIGATION PROGRAM.

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

NA

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

GA SITE INVESTIGATION PROGRAM FILE " SOUTHEAST TERMINAL GAD981469281"

EPA FORM 2070-13 (7-81)

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

EPA

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D981469281

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
UNOCAL CORPORATION		3805 PRESIDENTIAL PARKWAY		ATLANTA	GA	30340
STANDARD OIL CO. of OHIO						

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
GULF OIL COMPANY				HUSTON	TX	

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

GA EPD SITE INVESTIGATION PROGRAM FILE "SOUTHEAST TERMINAL GAD 981469281"

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D981469281

II. CURRENT OPERATOR *(Provide if different from owner)*

01 NAME	02 D+B NUMBER
UNOCAL CORPORATION	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
3805 PRESIDENTIAL PARKWAY	

05 CITY	06 STATE	07 ZIP CODE
ATLANTA	GA	30340

08 YEARS OF OPERATION	09 NAME OF OWNER
UNKNOWN	

OPERATOR'S PARENT COMPANY *(If applicable)*

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) *(List most recent first; provide only if different from owner)*

01 NAME	02 D+B NUMBER
UNION OIL COMPANY	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
3805 PRESIDENTIAL PARKWAY	

05 CITY	06 STATE	07 ZIP CODE
ATLANTA	GA	30340

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
UNION	

PREVIOUS OPERATORS' PARENT COMPANIES *(If applicable)*

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

GA EPD SITE INVESTIGATION PROGRAM File " SOUTHEAST TERMINAL GAD 981469281 "

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D981469281

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
SOUTHEAST TERMINAL	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
5800 ST. ELMO AVE	

05 CITY	06 STATE	07 ZIP CODE
FLINTSTONE	GA	30725

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
NA			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
NA			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e g , state files, sample analysis, reports)

GA EPD SITE INVESTIGATION PROGRAM File " SOUTHEAST TERMINAL GAD 981469281 "

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	0981469281

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	D981469281

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

III. SOURCES OF INFORMATION *(Cite specific references, e g , state files, sample analysis, reports)*

GA EPD SITE INVESTIGATION PROGRAM FILE "SOUTHEAST TERMINAL GAD 981469281"

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GA	GAD981469281

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

NA

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

GA EPD SITE INVESTIGATION PROGRAM - SOUTHEAST TERMINAL
GAD981469281

EPA FORM 2070-13 (7-81)

APPENDIX F

Facility name: SOUTHEAST TERMINAL

Location: 5800 ST. ELMO AVE., FLINTSTONE, GA 30725

EPA Region: IV

Person(s) in charge of the facility: JIM BASS / UNOCAL CORP
13 CORPORATE SQUARE N.E.
ATLANTA, GA 30302

Name of Reviewer: _____ Date: _____

General description of the facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

Scores: S_M = 13.29 (S_{gw} = 22.37 S_{sw} = 5.31 S_a = 0)

S_{FE} = 0

S_{DC} = 0

FIGURE 1
HRS COVER SHEET

Southeast Terminal is a bulk oil distribution terminal. Petroleum product is received via pipeline and shipped out via trucks. Leaded fuels have been at the facility since it was built in the mid 40's. Lead is present in the soil around the product storage area. Xylene and ethyl benzene is present in the ground water at the facility.

There is limited use of ground water for drinking water within three miles of the facility. Surface water from the facility drains to the west and into The Chattanooga Creek. There are no surface water intakes within three miles and downstream of the facility. However, some recrational use of the Chattanooga Creek occurs in this area.

Ground Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
[1] Observed Release	0 (45)	1	45	45	3.1
If observed release is given a score of 45, proceed to line [4]. If observed release is given a score of 0, proceed to line [2].					
[2] Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 3	2		6	
Net Precipitation	0 1 2 3	1		3	
Permeability of the Unsaturated Zone	0 1 2 3	1		3	
Physical State	0 1 2 3	1		3	
Total Route Characteristics Score				15	
[3] Containment	0 1 2 (3)	1	3	3	3.3
[4] Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 (18)	1	18	18	
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8	1	1	8	
Total Waste Characteristics Score			19	26	
[5] Targets					3.5
Ground Water Use	0 1 2 (3)	3	9	9	
Distance to Nearest Well/Population Served	0 4 (6) 8 10 / 12 16 18 20 / 24 30 32 35 40	1	6	40	
Total Targets Score			15	49	
[6] If line [1] is 45, multiply [1] x [4] x [5] If line [1] is 0, multiply [2] x [3] x [4] x [5]			12,825	57,330	
[7] Divide line [6] by 57,330 and multiply by 100			S_{gw} = 22.37		

FIGURE 2
GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi-plier	Score	Max. Score	Ref. (Section)
[1] Observed Release	0	45	1		45	4.1
If observed release is given a value of 45, proceed to line [4]. If observed release is given a value of 0, proceed to line [2].						
[2] Route Characteristics						4.2
Facility Slope and Intervening Terrain	(0) 1 2 3		1	0	3	
1-yr. 24-hr. Rainfall	0 1 2 (3)		1	3	3	
Distance to Nearest Surface Water	0 1 (2) 3		2	4	6	
Physical State	0 1 2 (3)		1	3	3	
Total Route Characteristics Score				10	15	
[3] Containment	0 1 2 (3)		1	3	3	4.3
[4] Waste Characteristics						4.4
Toxicity/Persistence	0 3 6 9 12 15 (18)		1	18	18	
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8		1	1	8	
Total Waste Characteristics Score				19	26	
[5] Targets						4.5
Surface Water Use	0 1 (2) 3		3	6	9	
Distance to a Sensitive Environment	(0) 1 2 3		2	0	6	
Population Served/Distance to Water Intake Downstream	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40		1	0	40	
Total Targets Score				6	55	
[6] If line [1] is 45, multiply [1] x [4] x [5] If line [1] is 0, multiply [2] x [3] x [4] x [5]				3,420	64,350	
[7] Divide line [6] by 64,350 and multiply by 100			S_{SW} = 5.31			

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

NOT SCORED

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
[1] Observed Release	0 45	1		45	5.1
Date and Location:					
Sampling Protocol:					
If line [1] is 0, the S_a = 0. Enter on line [5]. If line [1] is 45, then proceed to line [2].					
[2] Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
[3] Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
[4] Multiply [1] x [2] x [3]				35,100	
[5] Divide line [4] by 35,100 and multiply by 100		S_a =			

FIGURE 9
AIR ROUTE WORK SHEET

	s	s^2
Groundwater Route Score (S_{gw})	22.37	500.44
Surface Water Route Score (S_{sw})	5.31	28.20
Air Route Score (S_a)	0	0
$s_{gw}^2 + s_{sw}^2 + s_a^2$		528.44
$\sqrt{s_{gw}^2 + s_{sw}^2 + s_a^2}$		22.99
$\sqrt{s_{gw}^2 + s_{sw}^2 + s_a^2} \,/\, 1.73 = S_M =$		13.29

FIGURE 10
WORKSHEET FOR COMPUTING S_M

Fire and Explosion Work Sheet (NOT SCORED)					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Containment	1 3	1		3	7.1
2 Waste Characteristics					7.2
Direct Evidence	0 3	1		3	
Ignitability	0 1 2 3	1		3	
Reactivity	0 1 2 3	1		3	
Incompatibility	0 1 2 3	1		3	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
3 Targets					7.3
Distance to Nearest Population	0 1 2 3 4 5	1		5	
Distance to Nearest Building	0 1 2 3	1		3	
Distance to Sensitive Environment	0 1 2 3	1		3	
Land Use	0 1 2 3	1		3	
Population Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Buildings Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Total Targets Score				24	
4 Multiply 1 x 2 x 3				1,440	
5 Divide line 4 by 1,440 and multiply by 100		S_{FE} =			

FIGURE 11
FIRE AND EXPLOSION WORK SHEET

Direct Contact Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
[1] Observed Incident	0 45	1		45	8.1
If line [1] is 45, proceed to line [4] If line [1] is 0, proceed to line [2]					
[2] Accessibility	(0) 1 2 3	1	0	3	8.2
[3] Containment	0 (15)	1	15	15	8.3
[4] Waste Characteristics Toxicity	0 1 2 (3)	5	15	15	8.4
[5] Targets					8.5
Population Within a 1-Mile Radius	0 1 (2) 3 4 5	4	8	20	
Distance to a Critical Habitat	(0) 1 2 3	4	0	12	
Total Targets Score			8	32	
[6] If line [1] is 45, multiply [1] x [4] x [5] If line [1] is 0, multiply [2] x [3] x [4] x [5]			0	21,600	
[7] Divide line [6] by 21,600 and multiply by 100		S_{DC} =	0		

FIGURE 12
DIRECT CONTACT WORK SHEET

GROUND WATER ROUTE

1. OBSERVED RELEASE (assigned value = 45)
Contaminants detected (5 maximum):
Ethyl benzene and xylenes were detected in a ground water sample (SETW-2) obtained from an on-site monitoring well on 11/5/87. (reference 1)

Rational for attributing the contaminants to the facility:
Benzene and xylene are common costituents of petroleum. (reference 2)

2. ROUTE CHARACTERISTICS (not scored)
Depth to Aquifer of Concern:

Name/Description of Aquifer(s) of concern:
The aquifer of concern includes the rock units included in the Pensylvanian Rocks, the Mississippian Rocks, the Fort payne Chert, the Red mountain Formation the Chickamauga Limestone, and the Knox Group (reference 3).

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

Depth from the ground surface to the lowest point of waste disposal/storage:

Net Precipitation

Mean Annual or seasonal precipitation (list months for seasonal):

Mean annual lake or seasonal evaporation(list months for seasonal):

Net precipitation (subtract the above figures):

Permeability of Unsaturated Zone

Soil type in the unsaturated zone:

Permability associated with soil type:

Physical State

Physical state of substances at time of disposal (or present time for generated gases):

3. CONTAINMENT

Containment (not scored)

Method(s) of waste or leachate containment evaluated:

Method with the highest score:

4. WASTE CHARACTERISTICS

Toxicity and Persistence (assigned value = 18)

Compound(s) evaluated:
The compounds evaluated are lead, ethyl benzene, and xylene. (reference 1)

Compound with the highest score:

Hazard Waste Quantity (assigned value = 1)

Total quantity of hazardous substances at the facility, excluding thoes with a containment score of 0 (Give a resonable estimate even if quantity is above maximum):
Lead is the highest scoring compound. (reference 6)

Basis of estimating and/or computing waste:
NA

5. TARGETS

Ground Water Use (assigned value = 3)

Use(s) of the aquifer of concern within a 3-mile radius of the facility:
Ground water is used as a source of drinking water within three miles of the facility. (reference 5)

Distance to the Nearest Well

Location of nearest well drawing from the aquifer of concern or occupied building not served by a public water supply:
The nearest well drawing from the aquifer of concern is located at Rt. 1, Box 31, Flintstone, Georgia 30725. (reference 4)

Distance to above well or building: (assigned value = 6)
The distance to the nearest well is 1.38 miles. (reference 5)

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) within a 3-mile radius and populations Served by each:
A total of five homes use ground water as a source of drinking water within three miles of the site. (reference 5)

Computation of land area irrigated by supply wells drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):
No land is irrigated with ground water within three miles of the site. (reference 7 and 8)

Total population served by ground water within a 3-mile radius:
A total of 19 (3.8 people/home X 5 homes) use ground water as a source of drinking water within three miles of the site. (calculation)

SURFACE WATER ROUTE

1. OBSERVER RELEASE (NA)

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

Rational for attributing to the contaminants to the facility:

2. ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain (assigned value = 0)

Average slope of the facility in percent:
The average slope of the facility is 0.49 per cent. (reference 9)

Elevation of the facility at point A = 205 meters

Elevation of the facility at point B = 203.5 meters

difference 1.5 meters
(1.5 meters = 4.92 feet)

The distance from point A to point B is 1000 feet.

$$\text{slope} = \frac{4.92}{1000} \times 100 = 0.49\%$$

Name/description of the nearest downslope surface water:
The nearest downslope surface water is The Chattanooga Creek. Chattanooga Creek is a perennial stream east of the site flowing from Georgia north into Tennessee. Once inside Tennessee it bends east and meanders across the Tennessee-Georgia border approximately one mile before turning north into Chatanooga.

Average slope of terrain between facility and above cited surface water body in percent:
The average slope of the terrain between the facility and the Chattanooge Creek is 1.86%.

elevation of the most downslope point of the hazardous material = 203.5 meters
(interpolation)
(point B)

elevation of the downslope surface
water (point B)(interpolation) = 195 meters

difference ---------- 8.5 meters = 27.88 feet

distance to the Chattanooga Creek from the the most downslope point of contamination (point B) = 1500 feet

$$\text{slope} = \frac{27.88}{1500} \times 100 = 1.86\%$$

Is the facility located either totally or partially in surface water?
No, the elevation of the facility is 200 Meters above mean sea level. (reference 9)

Is the facility completely surrounded by areas of higher elevation?
No, the facility drains into the Chickamauga Creek to the east. (reference 9)

1-Year 24-Hour Rainfall In Inches (assigned value=3)
The one-year 24-hour rainfall for the area is 3.25 inches. (reference 10)

Distance to Nearest Downslope Surface Water (assigned value = 2)
The nearest downslope surface water is 1500 feet away from the facility. (reference 9)

Physical State of Waste (assigned value=3)
The physical state of the waste at the time of disposal was a sludge. (reference 5)

3. CONTAINMENT

Containment (assigned value=3)
Method(s) of waste or leachate containment evaluated:
The method of waste containment evaluated is an uncovered waste pile, waste not consolidated, and no containment system. (reference 5)

Method with highest score:
NA, only one method was evaluated.

4. WASTE CHARACTERISTICS

Toxicity and Persistence (assigned value = 18)

Compounds(s) evaluated:
The compound evaluated is lead. (reference 1)

Compound with highest score:
NA, only one compound was evaluated.

Hazard Waste Quantity (assigned value=1)

Total quantity of hazardous substances at the facility, excluding thoes with a containment score of 0 (Give reasonable estimate even if quantity is above maximum):
The quantity of waste lost at the facility is unknown however, contamination is known to be present. (reference 5 and 1)

Basis for estimating and/or computing waste quantity:
Contamination is known to be present (reference 1)

5. TARGETS

Surface Water Use (assigned value = 2)

Use(s) of surface within three miles downstream of the hazardous substance:
Surface water within three miles and down stream of the site is used for fishing. (reference 11)

Is there a tidal influence?
The elevation of the site is 205 meters above mean sea level. There is no tidal influence. (reference 9)

Distance to a Sensitive Environment (assigned value = 0)

Distance to 5-acre (minimum) costal wetland, if 2 miles or less:
There is no coastal wetland within two miles of the site. (reference 9)

Distance to 5-acres (minimum) fresh-water wetland, if 1 mile or less:
There is no fresh water wetland within one mile of the site. (reference 9)

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:
There is no critical Habitat of a federally endangered species within one mile of the site. (reference 12)

Population Served by Surface Water (assigned value = 0)

Location(s) of water-supply intakes(s) within three miles (free-flowing bodies) or 1 mile (static water bodies) down stream of the hazardous substance and population served by each intake:

There are no water-supply intakes within three miles and downstream of the the hazardous substances. (reference 9)

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

There is no cropland irrigated with surface water within three miles and downstream of the site. (reference 7 and 8)

Total population served:

The population served by surface water is zero.

Name/description of nearest of above water bodies:

NA

Distance to above-cited intakes, measured in stream miles:

AIR ROUTE (not scored)

There no evidence of an air release from the waste at the site.

FIRE AND EXPLOSION (not scored)

Based on field observations, there is no fire or explosion threat from waste at the site.

DIRECT CONTACT

1. OBSERVED INCIDENT
Date, location, and pertinant details of incident:
NA

2. ACCESSIBILITY (assigned value =0)
Describe type of barrier(s):
The product storage area is inside a locked fence. Access to this area is controlled. (reference 5)

3. CONTAINMENT
Type of containment, if applicable: (assigned value = 15)
Lead was detected in surface soil samples on-site. The contaminated soil is accessable to personnel working at the facility. (reference 1 and 4)

4. WASTE CHARACTERISTICS

Toxicity (assigned value =18)
Compounds evaluated:
The compound evaluated is lead. (reference 1)

Compound with the highest score:
NA, only one compound was evaluated.

5. TARGETS
Population within one-mile radius (assinned value = 2)
Threehundred forty seven people reside within a mile of the site. (reference 9).L8

Distance to critical habitat (of endangered species) (assigned value = 0)

There is no critical habitat of an endangered species within a mile of the site. (reference 12)

HRS REFERENCES

1. Laboratory Report, Georgia Environmental Protection Division, Southeast Terminal, November 5, 1987.

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4. Evans, Charles P.; Georgia Environmental Protection Division; Trip Report-Southeast Terminal, Flintstone, GA November 12, 1987.

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6. Sax, N. I.; Dangerous Properties of Industrial Materials, 6th ed.; Van Nostrand Reinhold, 1984.

7. Bunn, Mike, Walker County Extension Agent, Record of Telephonic Conversation with Charles P. Evans, Georgia Environmental Protection Division, June 25, 1987.

8. Cummings, Mickey, Dade County Extension Agent, Record of Telephonic Conversation with Charles P. Evans, Georgia Environmental Protection Division, June 25, 1987.

9. United States Geological Survey, Fort Oglethorpe, Georgia.-Tennessee and Hooker, Georgia-Tennessee Quadrangles; Scale 1:24,000, 1982.

10. National Oil and Hazardous Substances Contingency Plan, Appendix A, 40 CFR part 300, 47 Federal Register, 31219.

11. Primmer, Kim; Regional Supervisor, Georgia Department of Natural Resources, Game and Fish Division, Record of Telephonic Conversation with Charles P. Evans, Georgia Environmental Protection Division, April 17, 1987.

12. United States Department of The Interior; Fish and Wildlife Service; Region Four Endangered Species Notebook; August 23, 1985.

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

LABORATORY REPORT

656-7904

SAMPLE

DATE: 11/5/87 PROJECT: SOUTHEAST TERMINAL COLLECTOR: C. EVANS

	HW LOG NO.	2903	2904			
DATE REC'D	11-6-87	SETW-1	SETW-2			
TIME REC'D	1400	OFF-SITE ~~WA~~ GROUND-WATER	ON-SITE GROUND WATER			
REC'D BY:	D Reed					
DEL BY:	Evans					
	J Harold Langford LABORATORY MANAGER					
DATE: 12-14-87						
PARAMETERS	LAB NO.	HW 2903	HW 2904			
Total Ag	mg/L	<10	<10			
" As	"	<30	<30			
" Ba	"	10	195			
" Cd	"	<10	<10			
" Cr	"	<10	<10			
" Pb	"	<30	<30			
" Se	"	<5	<5			
VOA		See Attached Sheets				

REMARKS:

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

LABORATORY REPORT

656-7404

FILE

DATE: 11/5/87 PROJECT: SOUTHEAST TERMINAL COLLECTOR: C. EVANS

HW LOG NO.

DATE REC'D 11-6-87 LABEL

TIME REC'D 1400

REC'D BY: DReed

DEL BY: Evans

J Ascald Lanford
LABORATORY MANAGER

DATE: 12-14-87

PARAMETERS	LAB NO.	HW2905	HW2906	HW2907	HW2908
		SETS-1 OFF-SITE SOIL SAMPLE	SETS-2 DRIANAGE AREA SOIL SAMPLE	SETS-3 SOIL COMPOSITE UNION OIL TANK AREA	SETS-4 SOIL COMPOSITE GULF OIL TANK AREA
% Solids		92.4	63.0	92.5	89.3
Total Ag	mg/Kg	<1	<4	<1	<1
" As	"	9.7	12	19	17
" Ba	"	53	415	120	76
" Cd	"	<1	<1	<1	<1
" Cr	"	29	21	27	47
" Pb	"	6.3	71	245	1300
" Se	"	<5	<5	<5	<5
EP Ag	µg/L			<20	<20
" As	"			<60	<60
" Ba	"			1310	570
" Cd	"			<20	<20
" Cr	"			<20	<20
" Pb	"			70	<40
" Se	"			<100	<100
VOA		<5 ppb	Attached	Sheets	→

REMARKS:

DATE: 12-11-87 GEORGIA ENVIRONMENTAL PROTECTION DIVISION SAMPLE REC'D (date & time):
PROJECT: Southeast Terminals PURGEABLE ORGANIC ANALYSIS-WATER SAMPLE START (date & time):
SOURCE: W-1 DATA REPORTING SHEET SAMPLE STOP (date & time):
Off-Site Groundwater
SAMPLE TYPE: Water CHEMIST: MB COMPLETE: OK
SAMPLE NO.: HW 2563

Compound	Storet#		Units	Compound	Storet#		Units
Methylene Chloride	34423	<5	µg/l	Acetone		<10	µg/l
Trichlorofluoromethane	34488	<1	µg/l	Methyl Ethyl Ketone		<10	µg/l
1,1-Dichloroethylene	34501		µg/l	Carbon Disulfide		<1	µg/l
1,1-Dichloroethane	34496		µg/l				µg/l
1,2-Trans-Dichloro-ethylene	34546		µg/l	Isopropyl Acetate 2-Hexanone			µg/l
Chloroform	32106		µg/l	Methyl Isobutyl Ketone			µg/l
1,2-Dichloroethane	32103		µg/l	Styrene			µg/l
1,1,1-Trichloroethane	34506		µg/l	O-Xylene			µg/l
Carbon Tetrachloride	32102		µg/l	P-Xylene			µg/l
Dichlorobromomethane	32101		µg/l	M-Xylene			µg/l
1,2-Dichloropropane	34541		µg/l	Ethyl Acetate			µg/l
Trans-1,3-Dichloro-propene	34699		µg/l	n-Propyl Acetate Butyl Acetate			µg/l
Trichloroethylene	39180		µg/l	Acrolein	34210	<50	µg/l
Benzene	34030		µg/l	Acrylonitrile	34215	<50	µg/l
Chlorodibromomethane	34306		µg/l	Chloromethane	34418	<10	µg/l
1,1,2-Trichloroethane	34511		µg/l	Bromomethane	34413		µg/l
Cis-1,3-Dichloropropene	34704		µg/l	Vinyl Chloride	39175		µg/l
2-Chloroethyl Vinyl Ether	34576			Chloroethane	34311		µg/l
Bromoform	32104		µg/l				µg/l
1,1,2,2-Tetrachloro-ethane	34516		µg/l				µg/l
Tetrachloroethylene	34475		µg/l				µg/l
Toluene	34010		µg/l				µg/l
Chlorobenzene	34301		µg/l				µg/l
Ethylbenzene	34371		µg/l				µg/l

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

M - NOT ANALYZED

No other purgeable organic compound detected with an estimated minimum detection limit of _____

DATE 2-11-87 GEORGIA ENVIRONMENTAL PROTECTION DIVISION SAMPLE REC'D (date & time):
PROJECT: Southeast Terminals PURGEABLE ORGANIC ANALYSIS-WATER SAMPLE START (date & time):
SOURCE: On-Site DATA REPORTING SHEET SAMPLE STOP (date & time):
Groundwater W-2
SAMPLE TYPE: Water CHEMIST: MB COMPLETE: DK
SAMPLE NO.: HW 2904

Compound	Storet#		Units	Compound	Storet#		Units
Methylene Chloride	34423	<200	µg/1	Acetone		<500	µg/1
Trichlorofluoromethane	34488	<50	µg/1	Methyl Ethyl Ketone		<500	µg/1
1,1-Dichloroethylene	34501		µg/1	Carbon Disulfide		<50	µg/1
1,1-Dichloroethane	34496		µg/1	Vinyl Chloride			µg/1
1,2-Trans-Dichloro-ethylene	34546		µg/1	Isopropyl Acetate 2-Hexanone			µg/1
Chloroform	32106		µg/1	Methyl Isobutyl Ketone			µg/1
1,2-Dichloroethane	32103		µg/1	Styrene			µg/1
1,1,1-Trichloroethane	34506		µg/1	O-Xylene			µg/1
Carbon Tetrachloride	32102		µg/1	P-Xylene } total		253	µg/1
Dichlorobromomethane	32101		µg/1	M-Xylene			µg/1
1,2-Dichloropropane	34541		µg/1	Ethyl Acetate		<50	µg/1
Trans-1,3-Dichloro-propene	34699		µg/1	n-Propyl Acetate Butyl Acetate			µg/1
Trichloroethylene	39180		µg/1	Acrolein	34210	<2000	µg/1
Benzene	34030		µg/1	Acrylonitrile	34215	<2000	µg/1
Chlorodibromomethane	34306		µg/1	Chloromethane	34418	<500	µg/1
1,1,2-Trichloroethane	34511		µg/1	Bromomethane	34413		µg/1
Cis-1,3-Dichloropropene	34704		µg/1	Vinyl Chloride	39175		µg/1
2-Chloroethyl Vinyl Ether	34576			Chloroethane	34311		µg/1
Bromoform	32104		µg/1				µg/1
1,1,2,2-Tetrachloro-ethane	34516		µg/1				µg/1
Tetrachloroethylene	34475		µg/1				µg/1
Toluene	34010		µg/1				µg/1
Chlorobenzene	34301		µg/1				µg/1
Ethylbenzene	34371	641	µg/1				µg/1

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

M - NOT ANALYZED

No other purgeable organic compound detected with an estimated minimum detection limit of _____

DATE: 12-14-87
PROJECT: Southeast Terminal
SOURCE: Off-Site Soil Sample

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
PURGEABLE ORGANIC ANALYSIS-SEDIMENT
DATA REPORTING SHEET

SAMPLE TYPE: Soil
SAMPLE NO.: AW 2905

SAMPLE REC'D (date & time):
SAMPLE START (date & time):
SAMPLE STOP (date & time):
CHEMIST: MB COMPLETED: [illegible]

Compound	Storet#		Units
Methylene Chloride	34426	<5	µg/Kg
Trichlorofluoromethane	34491	<1	µg/Kg
1,1-Dichloroethylene	34504		µg/Kg
1,1-Dichloroethane	34499		µg/Kg
1,2-Trans-Dichloro-ethylene	34549		µg/Kg
Chloroform	34318		µg/Kg
1,2-Dichloroethane	34534		µg/Kg
1,1,1-Trichloroethane	34509		µg/Kg
Carbon Tetrachloride	34299		µg/Kg
Dichlorobromomethane	34330		µg/Kg
1,2-Dichloropropane	34544		µg/Kg
Trans-1,3-Dichloro-propene	34697		µg/Kg
Trichloroethylene	34487		µg/Kg
Benzene	34237		µg/Kg
Chlorodibromomethane	34309		µg/Kg
1,1,2-Trichloroethane	34514		µg/Kg
Cis-1,3-Dichloropropene	34702		µg/Kg
2-Chloroethyl Vinyl Ether	34579		µg/Kg
Bromoform	34290		µg/Kg
1,1,2,2-Tetrachloro-ethane	44519		µg/Kg
Tetrachloroethylene	34478		µg/Kg
Toluene	34483		µg/Kg
Chlorobenzene	34304		µg/Kg
Ethylbenzene	34374		µg/Kg

Compound	Storet#		Units
Acetone		<10	µg/Kg
Methy Ehtyl Ketone		<10	µg/Kg
Carbon Disulfide		<1	µg/Kg
			µg/Kg
Isopropyl Acetate			µg/Kg
2-Hexanone			µg/Kg
Methyl Isobutyl Ketone			µg/Kg
Styrene			µg/Kg
O-Xylene			µg/Kg
P-Xylene			µg/Kg
M-Xylene			µg/Kg
Ethyl Acetate			µg/Kg
N-Propyl Acetate			µg/Kg
Butyl Acetate			µg/Kg
Acrolein	34213	<50	µg/Kg
Acrylonitrile	34218	<50	µg/Kg
Chloromethane	34421	<10	µg/Kg
Bromomethane	34416		µg/Kg
Vinyl Chloride	34495		µg/Kg
Chloroethane	34314		µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

No other purgeable organic compound detected with an estimated minimum detection limit of _____

M - NOT ANALYZED

DATE: 2-14-87 GEORGIA ENVIRONMENTAL PROTECTION DIVISION SAMPLE REC'D (date & time):
PROJECT: Southeast Terminal PURGEABLE ORGANIC ANALYSIS-SEDIMENT SAMPLE START (date & time):
SOURCE: SETS-2 Drainage Area Soil Sample DATA REPORTING SHEET SAMPLE STOP (date & time):
SAMPLE TYPE: Soil CHEMIST: MB COMPLETED: OK
SAMPLE NO.: HW 2506

Compound	Storet#		Units	Compound	Storet#		Units
Methylene Chloride	34426	< 5	µg/Kg	Acetone		< 10	µg/Kg
Trichlorofluoromethane	34491	< 1	µg/Kg	Methy Ehtyl Ketone		< 10	µg/Kg
1,1-Dichloroethylene	34504		µg/Kg	Carbon Disulfide		< 1	µg/Kg
1,1-Dichloroethane	34499		µg/Kg				µg/Kg
1,2-Trans-Dichloro-ethylene	34549		µg/Kg	Isopropyl Acetate			µg/Kg
Chloroform	34318		µg/Kg	2-Hexanone			µg/Kg
1,2-Dichloroethane	34534		µg/Kg	Methyl Isobutyl Ketone			µg/Kg
1,1,1-Trichloroethane	34509		µg/Kg	Styrene			µg/Kg
Carbon Tetrachloride	34299		µg/Kg	O-Xylene			µg/Kg
Dichlorobromomethane	34330		µg/Kg	P-Xylene			µg/Kg
1,2-Dichloropropane	34544		µg/Kg	M-Xylene			µg/Kg
Trans-1,3-Dichloro-propene	34697		µg/Kg	Ethyl Acetate			µg/Kg
Trichloroethylene	34487		µg/Kg	N-Propyl Acetate			µg/Kg
Benzene	34237		µg/Kg	Butyl Acetate			µg/Kg
Chlorodibromomethane	34309		µg/Kg	Acrolein	34213	< 50	µg/Kg
1,1,2-Trichloroethane	34514		µg/Kg	Acrylonitrile	34218	< 50	µg/Kg
Cis-1,3-Dichloropropene	34702		µg/Kg	Chloromethane	34421	< 10	µg/Kg
2-Chloroethyl Vinyl Ether	34579		µg/Kg	Bromomethane	34416		µg/Kg
Bromoform	34290		µg/Kg	Vinyl Chloride	34495		µg/Kg
1,1,2,2-Tetrachloro-ethane	44519		µg/Kg	Chloroethane	34314		µg/Kg
Tetrachloroethylene	34478		µg/Kg				µg/Kg
Toluene	34483		µg/Kg				µg/Kg
Chlorobenzene	34304		µg/Kg				µg/Kg
Ethylbenzene	34374		µg/Kg				µg/Kg
							µg/Kg

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

No other purgeable organic compound detected with an estimated minimum detection limit of _____

M - NOT ANALYZED

DATE: 12-11-87

PROJECT: Southeast Terminal

SOURCE: Soil Composite Union Oil Tank Area

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
PURGEABLE ORGANIC ANALYSIS-SEDIMENT
DATA REPORTING SHEET

SAMPLE TYPE: Soil
SAMPLE NO.: HW 2907

SAMPLE REC'D (date & time):
SAMPLE START (date & time):
SAMPLE STOP (date & time):

CHEMIST: MB COMPLETED: DR

Compound	Storet#		Units
Methylene Chloride	34426	<5	µg/Kg
Trichlorofluoromethane	34491	<1	µg/Kg
1,1-Dichloroethylene	34504		µg/Kg
1,1-Dichloroethane	34499		µg/Kg
1,2-Trans-Dichloro-ethylene	34549		µg/Kg
Chloroform	34318		µg/Kg
1,2-Dichloroethane	34534		µg/Kg
1,1,1-Trichloroethane	34509		µg/Kg
Carbon Tetrachloride	34299		µg/Kg
Dichlorobromomethane	34330		µg/Kg
1,2-Dichloropropane	34544		µg/Kg
Trans-1,3-Dichloro-propene	34697		µg/Kg
Trichloroethylene	34487		µg/Kg
Benzene	34237		µg/Kg
Chlorodibromomethane	34309		µg/Kg
1,1,2-Trichloroethane	34514		µg/Kg
Cis-1,3-Dichloropropene	34702		µg/Kg
2-Chloroethyl Vinyl Ether	34579		µg/Kg
Bromoform	34290		µg/Kg
1,1,2,2-Tetrachloro-ethane	44519		µg/Kg
Tetrachloroethylene	34478		µg/Kg
Toluene	34483		µg/Kg
Chlorobenzene	34304		µg/Kg
Ethylbenzene	34374		µg/Kg

Compound	Storet#		Units
Acetone		<10	µg/Kg
Methy Ehtyl Ketone		<10	µg/Kg
Carbon Disulfide		<1	µg/Kg
			µg/Kg
Isopropyl Acetate			µg/Kg
2-Hexanone			µg/Kg
Methyl Isobutyl Ketone			µg/Kg
Styrene			µg/Kg
O-Xylene			µg/Kg
P-Xylene			µg/Kg
M-Xylene			µg/Kg
Ethyl Acetate			µg/Kg
N-Propyl Acetate			µg/Kg
Butyl Acetate			µg/Kg
Acrolein	34213	<50	µg/Kg
Acrylonitrile	34218	<50	µg/Kg
Chloromethane	34421	<10	µg/Kg
Bromomethane	34416		µg/Kg
Vinyl Chloride	34495		µg/Kg
Chloroethane	34314		µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

No other purgeable organic compound detected with an estimated minimum detection limit of _____

M - NOT ANALYZED

DATE: 12-11-87

PROJECT: Southeast Terminal

SOURCE: Soil Composite Gulf Oil Tank Area

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
PURGEABLE ORGANIC ANALYSIS-SEDIMENT
DATA REPORTING SHEET

SAMPLE TYPE: Soil

SAMPLE NO.: HW 2908

SAMPLE REC'D (date & time):

SAMPLE START (date & time):

SAMPLE STOP (date & time):

CHEMIST: MB COMPLETED: DK

Compound	Storet#		Units
Methylene Chloride	34426	<5	µg/Kg
Trichlorofluoromethane	34491	<1	µg/Kg
1,1-Dichloroethylene	34504		µg/Kg
1,1-Dichloroethane	34499		µg/Kg
1,2-Trans-Dichloro-ethylene	34549		µg/Kg
Chloroform	34318		µg/Kg
1,2-Dichloroethane	34534		µg/Kg
1,1,1-Trichloroethane	34509		µg/Kg
Carbon Tetrachloride	34299		µg/Kg
Dichlorobromomethane	34330		µg/Kg
1,2-Dichloropropane	34544		µg/Kg
Trans-1,3-Dichloro-propene	34697		µg/Kg
Trichloroethylene	34487		µg/Kg
Benzene	34237		µg/Kg
Chlorodibromomethane	34309		µg/Kg
1,1,2-Trichloroethane	34514		µg/Kg
Cis-1,3-Dichloropropene	34702		µg/Kg
2-Chloroethyl Vinyl Ether	34579		µg/Kg
Bromoform	34290		µg/Kg
1,1,2,2-Tetrachloro-ethane	44519		µg/Kg
Tetrachloroethylene	34478		µg/Kg
Toluene	34483		µg/Kg
Chlorobenzene	34304		µg/Kg
Ethylbenzene	34374		µg/Kg

Compound	Storet#		Units
Acetone		<10	µg/Kg
Methy Ehtyl Ketone		<10	µg/Kg
Carbon Disulfide		<1	µg/Kg
			µg/Kg
Isopropyl Acetate			µg/Kg
2-Hexanone			µg/Kg
Methyl Isobutyl Ketone			µg/Kg
Styrene			µg/Kg
O-Xylene			µg/Kg
P-Xylene			µg/Kg
M-Xylene			µg/Kg
Ethyl Acetate			µg/Kg
N-Propyl Acetate			µg/Kg
Butyl Acetate			µg/Kg
Acrolein	34213	<50	µg/Kg
Acrylonitrile	34218	<50	µg/Kg
Chloromethane	34421	<10	µg/Kg
Bromomethane	34416		µg/Kg
Vinyl Chloride	34495		µg/Kg
Chloroethane,	34314		µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg
			µg/Kg

U - ANALYZED FOR BUT NOT DETECTED (value reported is detection limit - D.L.)

No other purgeable organic compound detected with an estimated minimum detection limit of _____

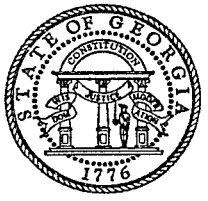
M - NOT ANALYZED

GEOLOGY AND GROUND-WATER RESOURCES OF WALKER COUNTY, GEORGIA

By

Charles W. Cressler
U.S. Geological Survey

Ref 3



Prepared in cooperation with the U.S. Geological Survey

DEPARTMENT OF NATURAL RESOURCES
Joe D. Tanner, Commissioner
ENVIRONMENTAL PROTECTION DIVISION
J. Leonard Ledbetter, Director
GEORGIA GEOLOGIC SURVEY
William H. McLemore, State Geologist

Atlanta

1981

Second Edition

(First Edition, 1964)

INFORMATION CIRCULAR 29

from less than 1 inch to more than 10 feet thick, and many are interfingered with beds of shale. Unweathered sandstone is gray to cream colored, but where weathered it is red or buff. A few beds of hematite occur.

The shale of the Red Mountain is in beds 0.1 inch to more than 10 inches thick. On fresh exposures it is gray but weathers rapidly to brown or maroon. Much of the shale contains layers and lenses of coarse sand or pebbles, particularly in eastern outcrops.

DEVONIAN AND MISSISSIPPIAN SYSTEM

Chattanooga Shale

The Chattanooga Shale was named for Chattanooga, Tenn., which is situated on a belt of the shale. The Chattanooga is a highly fissile shale, generally black, but brown where weathered. It is about 15 feet thick. The upper part of the Chattanooga is a layer of greenish clay, 1 foot to 2.5 feet thick, that contains phosphatic nodules ranging from 0.5 inch to 2 inches in diameter. This clay probably is the same as the Maury Formation of Tennessee.

The Chattanooga is folded and cleaved, whereas the Red Mountain Formation below and the Fort Payne Chert above are relatively undeformed. The shale is present everywhere between these two formations and is a useful geologic datum.

MISSISSIPPIAN SYSTEM

The Mississippian System of Georgia is composed of two diverse facies of rock of equivalent age. In Lookout and Pigeon Mountains, the Mississippian is almost entirely limestone and chert, except for the Pennington Shale at the top. East of Taylor Ridge all the Mississippian above the Fort Payne Chert is predominantly a shale that has limestone and sandstone members developed to various degrees at different localities. This facies was named the Floyd Shale from exposures in Floyd County, Ga. where it is fully developed.

Western Facies

The western facies of the Mississippian System includes the following members described in ascending order (descriptions taken largely from Butts, 1948).

Fort Payne Chert

The name Fort Payne is taken from Fort Payne, DeKalb County, Ala.

The Fort Payne is 390 feet thick. It is composed mainly of stratified chert and dark compact calcareous shale or argillaceous limestone, named the Lavender Shale Member (Butts, 1948, p. 44). The beds range in thickness from 2 inches to 1 foot and are irregularly furrowed along the bedding faces, causing an uneven contact. Small quartz geodes, 0.25 inch to 2.5 inches in diameter are common, but are more abundant in the lower part of the formation.

St. Louis Limestone

The St. Louis Limestone, named for St. Louis, Mo., is a thick-bedded dark fine-grained cherty limestone. The St. Louis generally is non-oolitic and is 100 feet thick.

Ste. Genevieve Limestone

The Ste. Genevieve Limestone, named from Ste. Genevieve, Mo., is easily distinguished from the St. Louis below by its oolitic and non-cherty character. It is gray to bluish gray, rather thick bedded, and coarsely crystalline and is probably nearly pure calcium carbonate. Its thickness is 100 to 200 feet.

Gasper Limestone

The Gasper Limestone is very similar lithologically to the Ste. Genevieve Limestone and would not be separated except for the fact that in western Kentucky and southern Illinois the two are separated by the Bethel Sandstone. The Gasper is a thick bedded gray rather coarsely crystalline noncherty limestone and is about 150 feet thick.

Golconda Formation

The Golconda consists of shale and interbedded thin platy limestone. Fossil evidence links this zone with limestone named from Golconda, Hardin County, Ill. It is less than 20 feet thick.

Hartselle Sandstone

Five to ten feet of sandstone or sandy limestone that weathers to sandstone, exposed in the northern end of Lookout Mountain, and probably represents the Hartselle Sandstone of Alabama (Butts, 1948, p. 48).

Bangor Limestone (restricted)

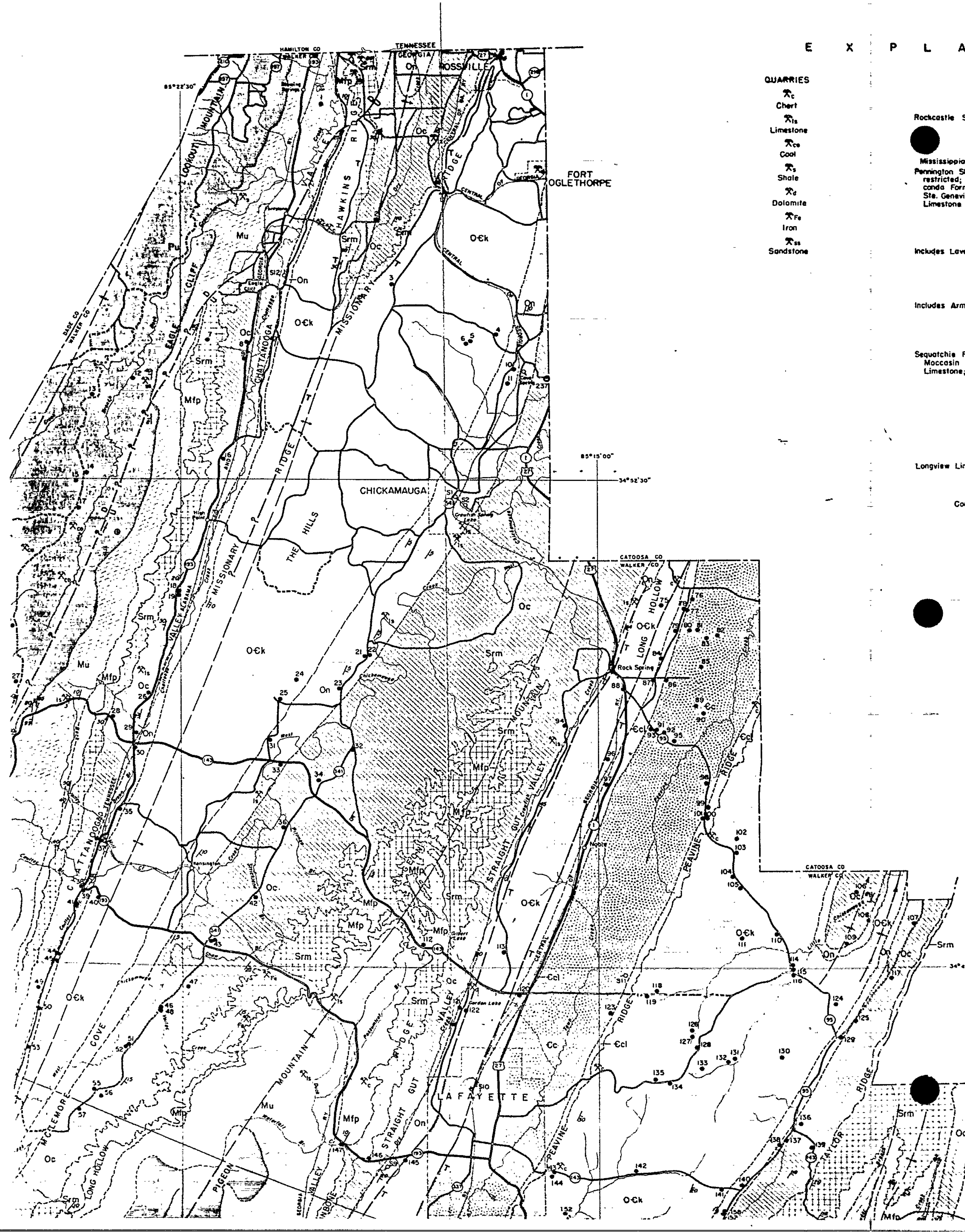
The Bangor is a thick bedded bluish gray coarsely crystalline limestone extending up to the Pennington Shale. It is about 500 feet thick.

Pennington Shale

The Pennington, named from Pennington Gap, Va., is predominantly a gray shale, which weathers yellow and red. The beds of red shale are a distinguishing characteristic. Some beds of sandstone and limestone occur in the formation. The Pennington contains an abundance of marine fossils, mainly bryozoa and brachipoda, which do not occur in the overlying Pennsylvanian rocks. The thickness is about 200 feet.

Eastern Facies

The eastern facies of the Mississippian System includes only the Fort Payne Chert and the Floyd Shale. The Fort Payne Chert is similar in both the eastern and western facies. The Floyd Shale is predominantly a gray to black fossiliferous shale and in many places includes limestone and sandstone units similar to those of the western facies. The eastern facies of the Mississippian System is about 1,500 feet thick.



EXPLA
QUARRIES
Chert
Limestone
Coal
Shale
Dolomite
Iron
Sandstone
Rockcastle S
Mississippia
Pennington S
restricted;
conda Forn
Ste. Genevi
Limestone
Includes Lav
Includes Arm
Sequatchie F
Moccasin
Limestone;
Longview Lin
Co
TENNESSEE
GEORGIA
HAMILTON CO
WALKER CO
DADE CO
WALKER CO
CATOOSA CO
WALKER CO
ROSSVILLE
FORT OGLETHORPE
CHICKAMAUGA
LAFAYETTE
Rock Spring
Noble
Kensington
High Point
Eagle Cliff
Crawfish Spring Lake
Gordon Lake
Gilbert Lake
85°22'30"
85°15'00"
34°52'30"
LOOKOUT MOUNTAIN
EAGLE CLIFF
MISSIONARY RIDGE
HAWKINS RIDGE
THE HILLS
CHATTANOOGA VALLEY
LONG HOLLOW
PEAVINE RIDGE
STRAIGHT GUT VALLEY
PIGEON MOUNTAIN
MCLEMORE COVE
TAYLOR RIDGE
O€k
Oc
On
Srm
Mfp
Mu
Pu
€cl
€c

Georgia Department of Natural Resources
205 Butler Street, S.E., Floyd Towers East, Atlanta, Georgia 30334
J. Leonard Ledbetter, Commissioner
Harold F. Reheis, Assistant Director
Environmental Protection Division

TRIP REPORT

November 12,1987

Site Name and Location:	Southeast Terminal 5800 St. Elmo Ave. Flintstone, GA 30725
EPA I.D. Number:	GAD981469281
County:	Walker
Trip By:	Charles P. Evans Environmental Specialist Site Inverstigation Program
Accompanied By:	John O. Costello Environmental Specialist Site Investigation Program
Date and Time of Investigation:	November 4, 1987 2:30 p.m. - 5:00 p.m. November 5, 1987 8:30 a.m. - 2:30 p.m.
Officals Contacted:	Jim Bass Manager, Safety and Environmental Control Southern Division UNOCAL Corporation 13 Corporate Square N.E. P.O. Box 4147 Atlanta, GA 30302 (404) 321-7600 R. E. Van Deusen Manager, Southern Terminal Southern Division UNOCAL Corporation 3805 Presidental Parkway Atlanta, GA 30340 (404) 451-9203 Ken Walton Southeast Terminal 5800 St. Elmo Ave. Flintstone, Ga 30725 (404) 820-0826

Ref 4

David Brown
Southeast Terminal
5800 St. Elmo Ave.
Flintstone, Ga 30725
(404) 820-0826

Reference:

Trip Report
Southeast Terminal
Flintstone, GA 30725
October 20, 1987

Comments:
I sampled the atmosphere in the monitoring wells on-site with an H-NU photoionizer to detect the presence of petroleum constituents in the ground water. I obtained the following results:

Well	Reading
LM-1	26 ppm
LM-2	1 ppm
LM-3	8.5 ppm
LM-4	0.5 ppm
LM-5	28 ppm
LM-6	140 ppm
LM-7	280 ppm
LM-8	1 ppm
LM-9	140 ppm
LM-10	60 ppm

The readings were highest in well number seven LM-7. Well seven was then bailed dry to prepare it for sampling. This area is reported to be an old rail car loading area. All wells are six inches in diameter with a PVC casing.
Information on the water level was obtained from Terminal personnel. The following readings were obtained on 11/3/87:

Well	Depth to Water from Top of Casing (ft.)	Casing Height Above Land Surface (ft.)	Depth to Water from Ground Surface (ft.)
LM-1	7.5	4.45	3.05
LM-2	7.25	4.05	3.21
LM-3	7.08	4.13	2.95
LM-4	5.5	2.71	2.79
LM-5	9.58	4.3	5.28
LM-6	15.42	2.0	13.42
LM-7	16.25	1.58	14.67
LM-8	18.58	3.42	15.16
LM-9	18.57	2.54	15.63
LM-10	14.25	0.25	14.00

I collected the following environmental samples on 11/5/87.

Sample Code	Location	Type of Sample
SETS-1	500 feet west and upslope of the site	Background soil sample
SETS-2	Drainage area of the site	Composite soil
SETS-3	Union Oil Co. product storage area	Composite soil
SETS-4	Standard Oil Co. product storage area	Composite soil
SETW-1	Off-Site well	Ground water
SETW-2	On-Site monitoring well (LM-7)	Ground water

All soil samples were collected at the surface. The area around the product tank clean-outs and drains was sampled to reflect a worst case condition.

CONCLUSIONS:
Pending laboratory data.

RECOMMENDATIONS AND FOLLOW-UP REQUIRED:
Complete HRS ranking of the site.

Photographs:
None

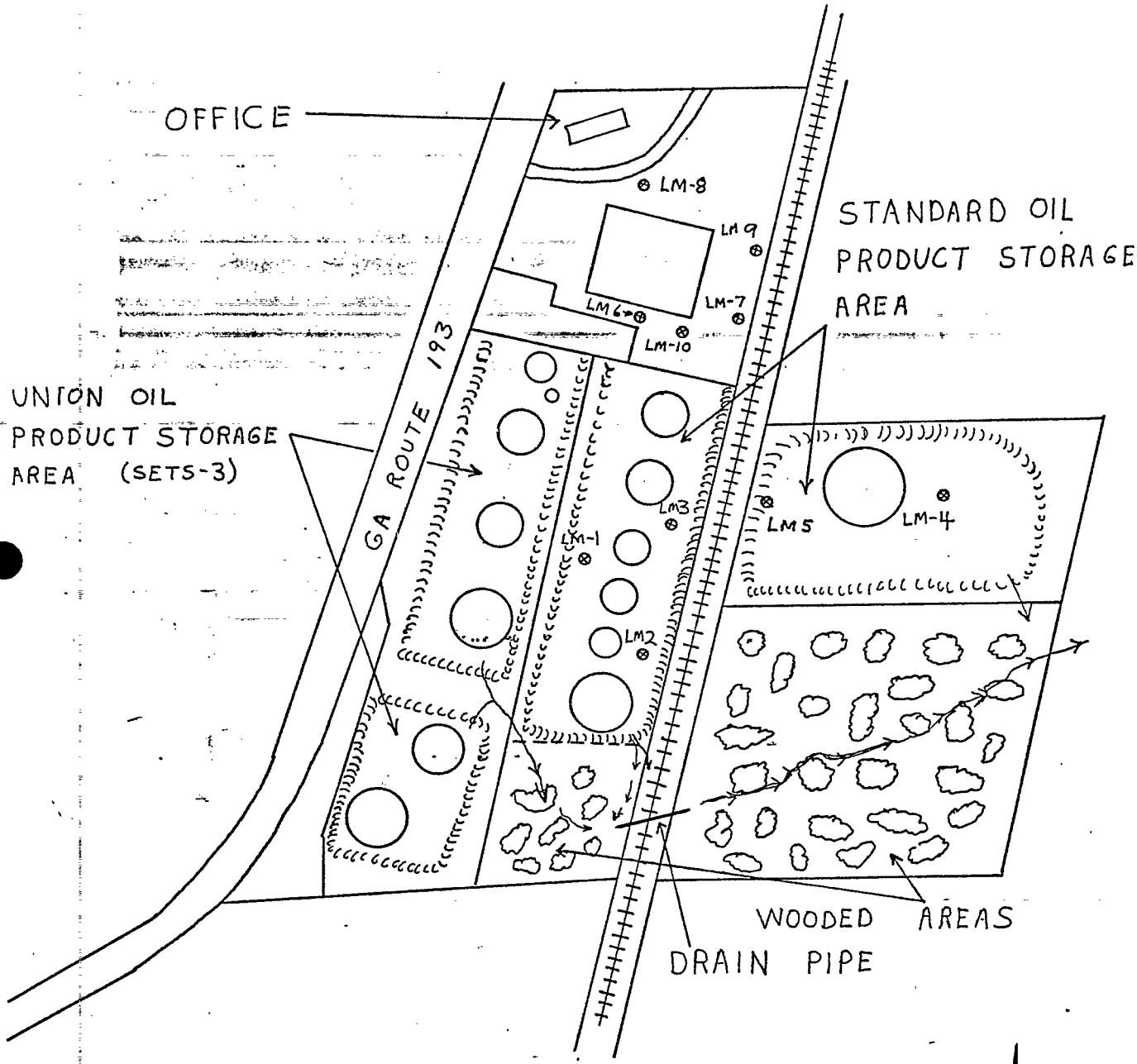
NUMBER OF WASTE/ENVIRONMENTAL SAMPLES TAKEN:
Six

REVIEWED BY: DATE:

ATTACHMENTS: SITE LOCATION MAP
SITE SKETCH

CPE/cpe

cc:Southeast Terminal
GAD981469281



SOUTHEASTERN TERMINAL
SITE SKETCH
SCALE 1" = 200'

Ref. 5

TRIP REPORT
OCTOBER 20, 1987

SITE NAME AND LOCATION:	Southeast Terminal
EPA ID NUMBER:	GAD981469281
COUNTY:	WALKER
TRIP BY:	Charles P. Evans Environmental Specialist Site Investigation Program
ACCOMPANIED BY:	None
DAY AND TIME OF INVESTIGATION:	October 14, 1987 8:00 a.m. - 2:00 p.m.
OFFICALS CONTACTED:	Ken Walton Terminal Manager 5800 St. Elmo Ave. Flintstone, Georgia 30275 (404) 448-0930 Walter Irwin Public Health Sanitarian Walker County Health Dept. 1430 Suggs Street Rossville, Georgia 30726 (404) 866-3122
REFERENCE:	Preliminary Assessment Southeast Terminal October 8, 1987

COMMENTS:
I conducted a reconnaissance of the site on October 13, 1987 to identify potential sampling points at the facility. I obtained the following information:

1. The facility is managed by Union Oil Company of California. However, one section is owned by Standard (Gulf) Oil Company of Ohio and the remainder of the facility is owned by Union Oil Company of Calfornia.

2. Spillage and surface run-off water from the truck loading area is collected and sent to the facilities oil-water

separateor.

3. Berms surround the product storage area to control run-on water. Rain water falling INSIDE the berms is discharged through valves or pumps to a low area southwest of the facility.

4. The product storage tanks at the facility are cleaned, at irregular intervals, of a sludge that accumulates in the tanks. Some loss of this sludge is expected to have occurred in the past.

5. Water accumulates inside the product storage tanks. Because of the difference in the density of water and petroleum the water settles to the bottom of the tanks. Routinely excess water is discharge to the surface, within the bermed area, through valves at the bottom of the tanks.

6. The water fraction from the oil-water separator is discharged to the surface in the bermed area of the Standard Oil Product Area.

7. There is no linner in the berm areas to pevent leaching into the ground water. Due to these two practices some waste is assumed to have been lost at the facility.

8. The product storage area is inside a locked fence. Access to the area is controled.

9. The monitoring wells have been installed on the facility to detect the presence of free product on the water table.

I conducted a well survey in the area in order to characterize the use of ground water for drinking purposes. The following information was obtained:

10. Few homes within three miles of the site use ground water as a source of drinking water. Five homes that use ground water for their source of drinking water are located within three miles of the site.

11. The closest well to the site is located at the home of Mr. J. Polk Smartt, Rt. 1, Box 31, Flintstone, Georgia 30725. This well is a six inch drilled well 365 feet deep.

12. Mr. Smartt's well is located 1.38 miles south of the site.

CONCLUSIONS:
Soil around the site may be contaminated with lead additives to the fuels stored there.

RECOMMENDATIONS AND FOLLOW-UP REQUIRED:
Proceed with sampling of the facility.

PHOTOGRAPHS:
None

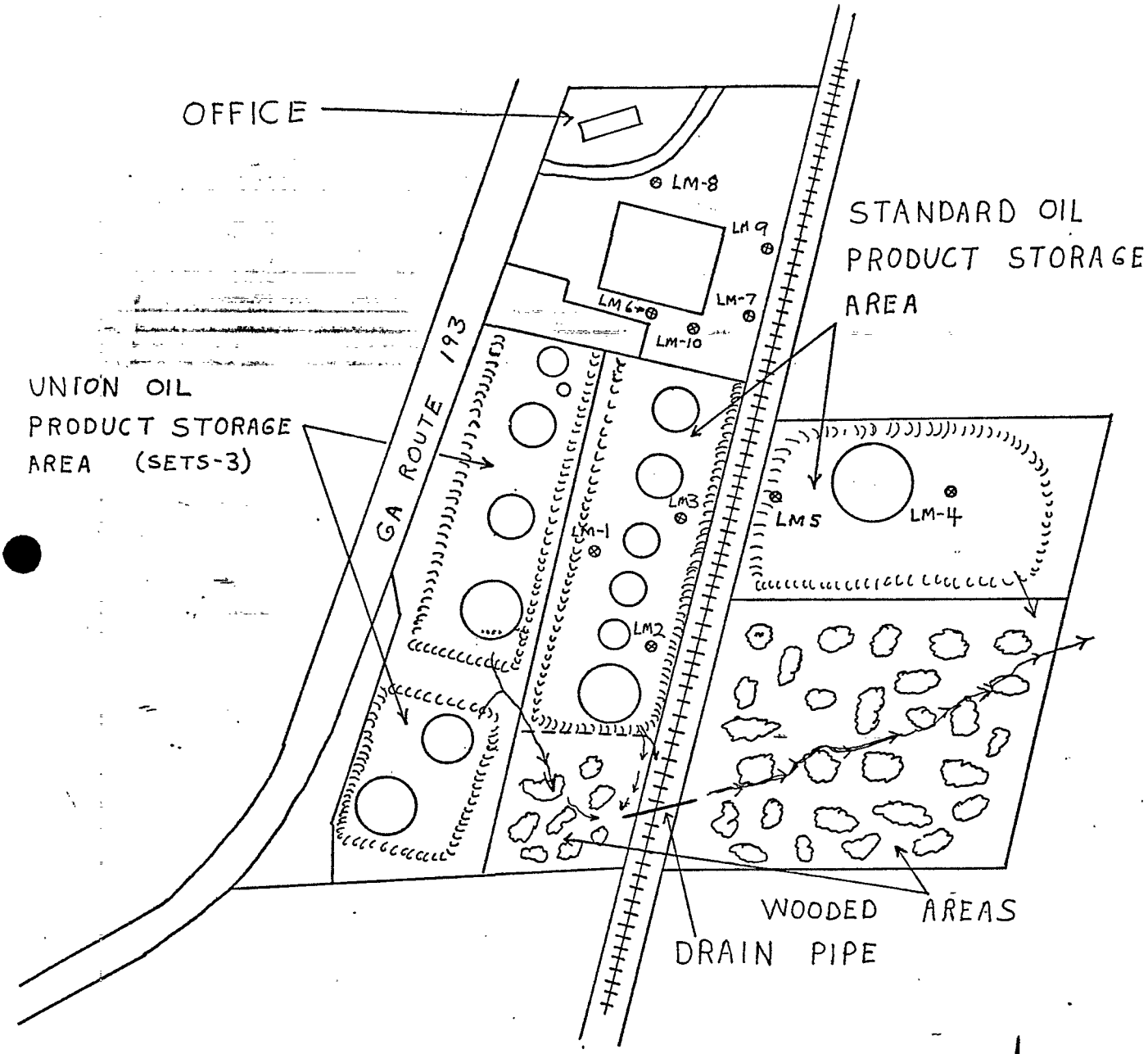
NUMBER OF WASTE/ENVIRONMENTAL SAMPLES TAKEN:
None

REVIEWED BY:_____ DATE:_____

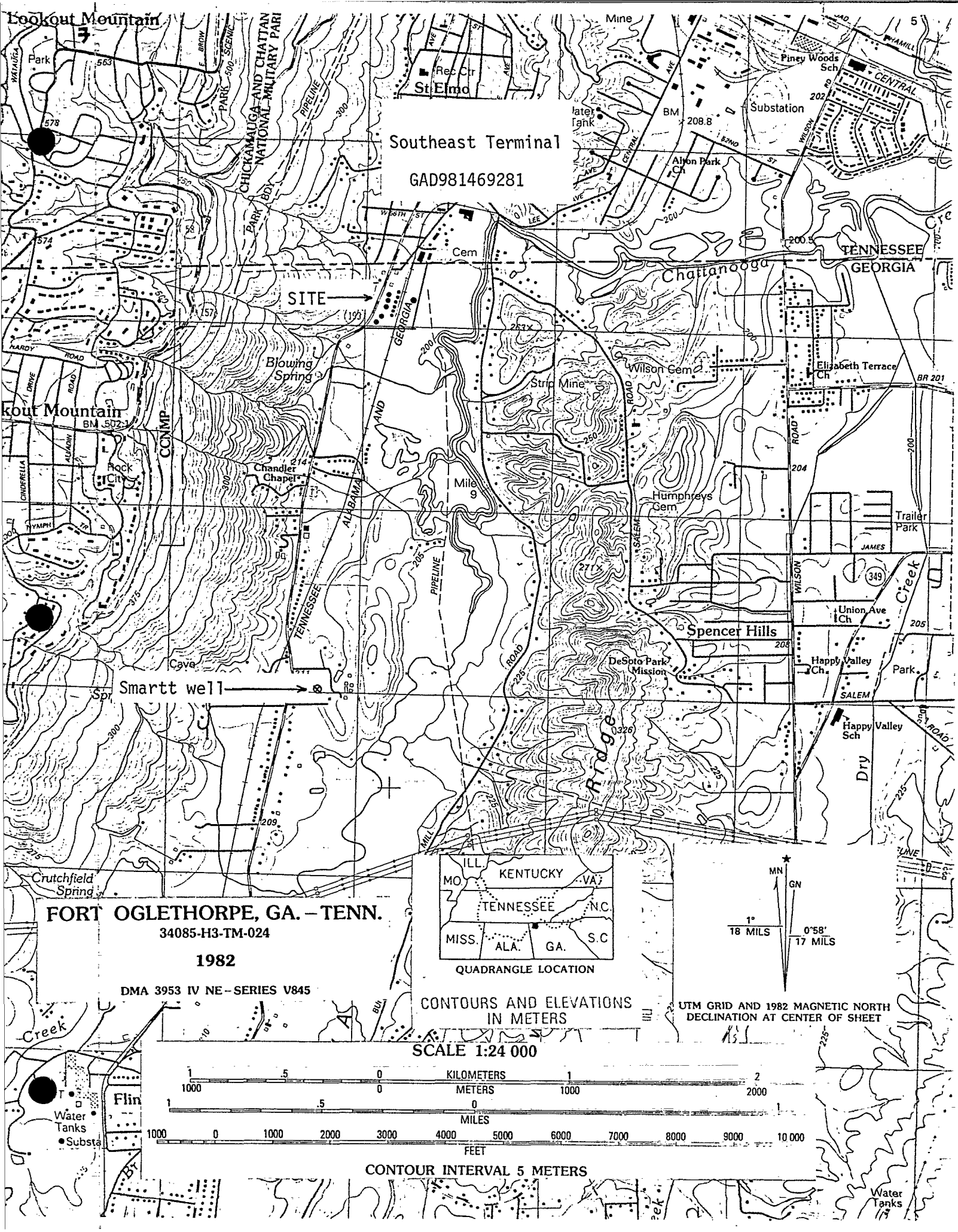
ATTACHMENTS: SITE LOCATION MAP
SITE SKETCH

CPE/cpe

CC: Southeast Terminal
GAD981469281



SOUTHEASTERN TERMINAL
SITE SKETCH
SCALE 1"= 200'



FORT OGLETHORPE, GA.–TENN.

34085-H3-TM-024

1982

DMA 3953 IV NE–SERIES V845

QUADRANGLE LOCATION

ILL. KENTUCKY VA.
MO. TENNESSEE N.C.
MISS. ALA. GA. S.C

CONTOURS AND ELEVATIONS IN METERS

UTM GRID AND 1982 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

MN GN
1° 18 MILS
0°58' 17 MILS

SCALE 1:24 000

1 .5 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 .5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000
FEET

CONTOUR INTERVAL 5 METERS

RECORD OF TELEPHONIC CONVERSATION

Site Investigation Program

Routing: _____ Date: JUNE 25, 1986

_____ Time: 2:00 ~~a.m.~~/p.m.

File: _____

Party Spoken To: MIKE BUNN Title: WALKER COUNTY EXTENSION AGENT

Agency/Company: WALKER COUNTY EXTENSION AGENT

Address: PO BOX 827 City: LA FAYETTE

Telephone Number: (404) 638 - 3892 State/Zip: GA. 30728

Subject: _____

Summary of Call: MR. BUNN SAID THAT THERE WAS NO IRRIGATION OF CROPLAND IN WALKER COUNTY.

Actions Required: NONE

Signature: Charles P. Lam 6/25/86

Follow-up Responses/Additional Comments: NA

Ref. #7

Signature: _____ Date: _____

SIP-2 9/86

RECORD OF TELEPHONIC CONVERSATION

Site Investigation Program

Routing: _____ Date: 12/14/87

_____ Time: 10:55 a.m./~~p.m.~~

File: _____

Party Spoken To: MICKEY CUMMINGS Title: EXTENSION AGENT

Agency/Company: DADE COUNTY EXTENSION AGENT

Address: PO BOX 550 City: TRENTON

Telephone Number: (404) 657 - 4116 State/Zip: GA 30752

Subject: IRRIGATION

Summary of Call:

MR. CUMMINGS did NOT have ANY KNOLEDGE of The USE of GROUND WATER FOR IRRIGATION of CROP LAND WITHIN Three miles of The SIZE.

Actions Required: _____

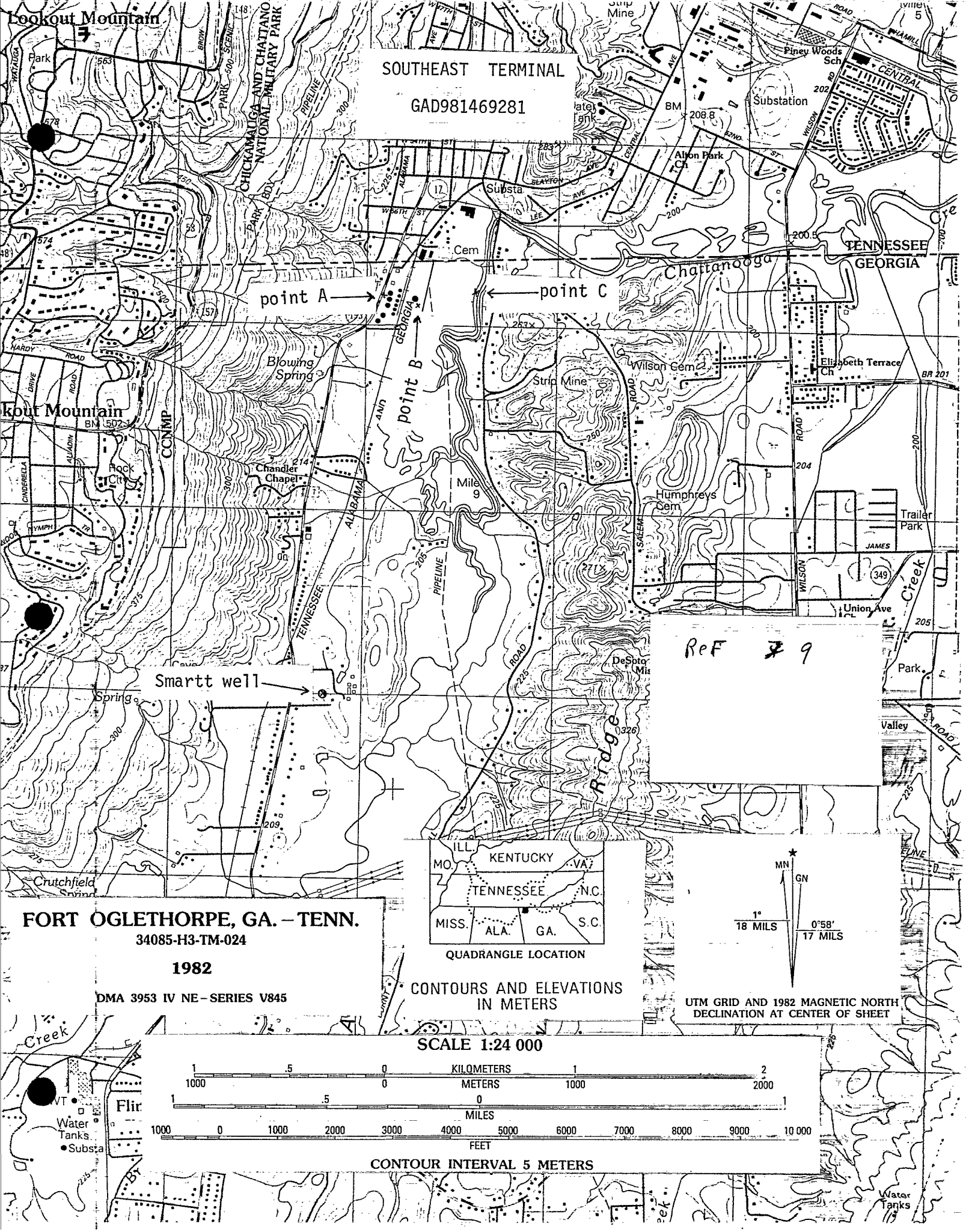
Signature: _____

Follow-up Responses/Additional Comments: _____

REF. # 8

Signature: _____ Date: _____

SIP-2 9/86



FORT OGLETHORPE, GA. – TENN.

34085-H3-TM-024

1982

DMA 3953 IV NE – SERIES V845

QUADRANGLE LOCATION

ILL. KENTUCKY VA. MO. TENNESSEE N.C. MISS. ALA. GA. S.C.

CONTOURS AND ELEVATIONS IN METERS

UTM GRID AND 1982 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

MN GN

1° 18 MILS 0°58' 17 MILS

SCALE 1:24 000

1 .5 0 KILOMETERS 1 2

1000 0 METERS 1000 2000

1 .5 0 1

MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000

FEET

CONTOUR INTERVAL 5 METERS

RECORD OF TELEPHONIC CONVERSATION

Site Investigation Program

Routing: _____ Date: 12/9/87

_____ Time: 11:00 a.m./~~p.m.~~

File: SOUTHEAST TERMINAL

Party Spoken To: KIM PRIMMER Title: REGIONAL FISHERY SUPERVISOR

Agency/Company: DEPARTMENT OF NATURAL RESOURCES GAME AND FISH DIVISION

Address: 1 memory LANE City: ~~CAH~~ CALHOUN

Telephone Number: (404) 629 - 1259 State/Zip: GA, 30701

Subject: FISHING ACTIVITY ON CHATTANOOGA CREEK IN GEORGIA

Summary of Call: MR. PRIMMER OPINION WAS THAT THE LEVEL OF FISHING WAS LOW ON CHATTANOOGA CREEK DUE TO ITS SIZE & THE TYPE OF FISH FOUND IN THIS AREA.

Actions Required: NONE.

Signature: Charles P. Eaves 12/9/87

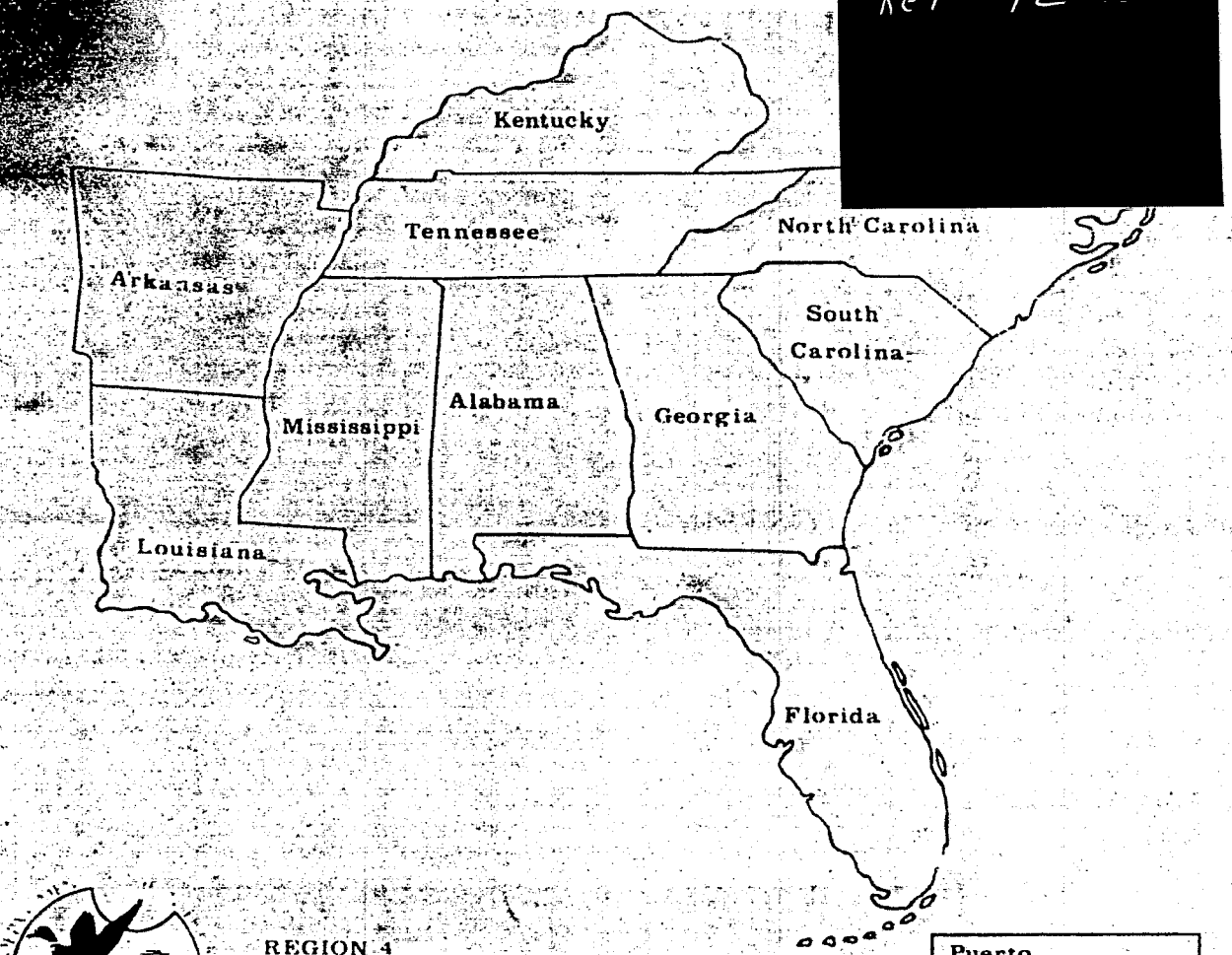
Follow-up Responses/Additional Comments: _____

Ref # 11

Signature: _____ Date: _____

SIP-2 9/86

ENDANGERED AND THREATENED SPECIES OF THE SOUTHEASTERN UNITED STATES



REGION 4
ATLANTA
GEORGIA

Reference

United States Department of the Interior

FISH AND WILDLIFE SERVICE
75 SPRING STREET, S.W.
ATLANTA, GEORGIA 30303

August 23, 1985

NOTICE

TO: All Project Leaders and Cooperators

FROM: Endangered Species Office, Federal Assistance, FWS, Atlanta, Georgia

SUBJECT: Changes to the Region 4 Endangered Species Notebook

This update covers the following actions: listing of the Carolina northern flying squirrel in North Carolina and Tennessee as endangered, listing of the Tar River spiny mussel in North Carolina as endangered, listing of five Florida pine rockland plants as endangered, listing of the Miccosukee gooseberry in Florida and South Carolina as endangered, listing of Ruth's golden aster in Tennessee and Vahl's boxwood in Puerto Rico as endangered, listing of the amber darter and Conasauga logperch in Georgia and Tennessee as endangered with critical habitat designated, reclassification of the alligator in Florida to threatened by similarity of appearance, and the proposed listing of two plants (pondberry and Florida golden aster).

REGIONAL LIST: Replace.

STATE LISTS: Replace FL, GA, NC, PR, SC, TN.

CRITICAL HABITAT: Replace index; add amber darter and Conasauga logperch designations for GA and TN.

PROPOSED RULEMAKING: Replace previous sheet.

Species Accounts: FISHES - Replace index; add accounts for two fishes.

PLANTS - Replace index; add accounts for eight plants.

Attachments

85-3

Federally Listed Species by State

GEORGIA

(E=Endangered; T=Threatened; CH=Critical Habitat determined)

Mammals	General Distribution
Bat, gray (Myotis grisescens) - E	Northwest, West
Bat, Indiana (Myotis sodalis) - E	Extreme Northwest
Manatee, Florida (Trichechus manatus) - E	Coastal waters
Panther, Florida (Felis concolor coryi) - E	Entire state
Whale, right (Eubalaena glacialis) - E	Coastal waters
Whale, finback (Balaenoptera physalus) - E	Coastal waters
Whale, humpback (Megaptera novaeangliae) - E	Coastal waters
Whale, sei (Balaenoptera borealis) - E	Coastal waters
Whale, sperm (Physeter catodon) - E	Coastal waters

Birds	
Eagle, bald (Haliaeetus leucocephalus) - E	Entire state
Falcon, American peregrine (Falco peregrinus anatum) - E	North
Falcon, Arctic peregrine (Falco peregrinus tundrius) - T	Coast, Northwest
Stork, wood (Mycteria americana) - E	Southeastern swamps
Warbler, Bachman's (Vermivora bachmanii) - E	Entire state
Warbler, Kirtland's (Dendroica kirtlandii) - E	Coast
Woodpecker, ivory-billed (Campephilus principalis) - E	South, Southwest
Woodpecker, red-cockaded (Picoides (=Dendrocopos) borealis) - E	Entire state

Reptiles	
Alligator, American (Alligator mississippiensis) - E	Inland coastal plain
Alligator, American (Alligator mississippiensis) - T	Coastal areas

GEORGIA (cont'd)

	General Distribution
Snake, eastern indigo (Drymarchon corais couperi) - T	Southeast
Turtle, Kemp's (Atlantic) ridley (Lepidochelys kempii) - E	Coastal waters
Turtle, green (Chelonia mydas) - T	Coastal waters
Turtle, hawksbill (Eretmochelys imbricata) - E	Coastal waters
Turtle, leatherback (Dermochelys coriacea) - E	Coastal waters
Turtle, loggerhead (Caretta caretta) - T	Coastal waters

Fishes

Darter, amber (Percina antesella) - E,CH	Conasauga R., Murray County
Darter, snail (Percina tanasi) - T	S. Chickamauga Cr., Catoosa County
Logperch, Conasauga (Percina jenkinsi) - E,CH	Conasauga R., Murray County
Sturgeon, shortnose (Acipenser brevirostrum) - E	Coastal rivers

Plants

Florida torreya (Torreya taxifolia) - E	Decatur County
Green pitcher plant (Sarracenia oreophila) - E	Towns County
Hairy rattleweed (Baptisia arachnifera) - E	Wayne, Brantley Counties
Persistent trillium (Trillium persistens) - E	Tallulah-Tugaloo River system, Rabun and Habersham Counties

Union 76 Division: Western Region
Union Oil Company of California
13 Corporate Square, N.E.
P.O. Box 4147, Atlanta, Georgia 30302
Telephone (404) 321-7600

W.E. Herchline
Division Distribution Manager, Atlanta

Atlanta, Georgia
December 9, 1985

Mr. Jack Dempsey
Georgia Department of Natural Resources
Hazardous Waste Management Program
Environmental Protection Division
Generator Compliance Unit
270 Washington Street, S.W.
Atlanta, Georgia 30334

RE: Southeast Terminals - EPA I.D. Numbers

Dear Mr. Dempsey:

Wish to refer you to Ms. Gail Mueller's (B.P. Oil Company, Inc.) letter to your department dated November 25, 1985, concerning the subject terminals which are joint owned by Union Oil Company of California and B.P. Oil, Inc.

As you noted, we have a Tennessee E.P.A. I.D. number for our Southeast Terminal located at Lookout Mountain, Georgia. This terminal has a Tennessee mailing address, but is located physically in Georgia.

We are attaching our Notification of Hazardous Waste Activity form and request that a Georgia E.P.A. I.D. number be issued.

Your assistance in this matter is appreciated.

Very truly yours,

F. C. Mills
Environmental Supervisor

FCM:ea

cc: Gail Mueller - B.P. Oil, Inc.
E. H. Jensen - w/attachment
R. E. Van Deusen

SITE DISCOVERY FORM

Part 1: Information necessary to add a site to CERCLIS

ACTION: A

EPA ID: _____

SITE NAME: Southeast Terminal Inc SOURCE: R (R=EPA, T=STATE)

STREET: 5800 St. Elmo Avenue/GA SR. 193 CONG DIST: __ (optional)

CITY: Flinstone ZIP: 30725 - ____

CNTY NAME: Walker CNTY CODE: ___ (optional)

LATITUDE: ~~34~~ 34 / 59 / 00 LONGITUDE: 85 / 20 / 00 (optional)

INVENTORY IND: Y REMEDIAL IND: Y REMOVAL IND: N FED FAC IND: N

RPM NAME: Mario E Villamarzo RPM PHONE: 404 -347 -2234 (EPA Project Office

SITE DESCRIPTION: (optional)

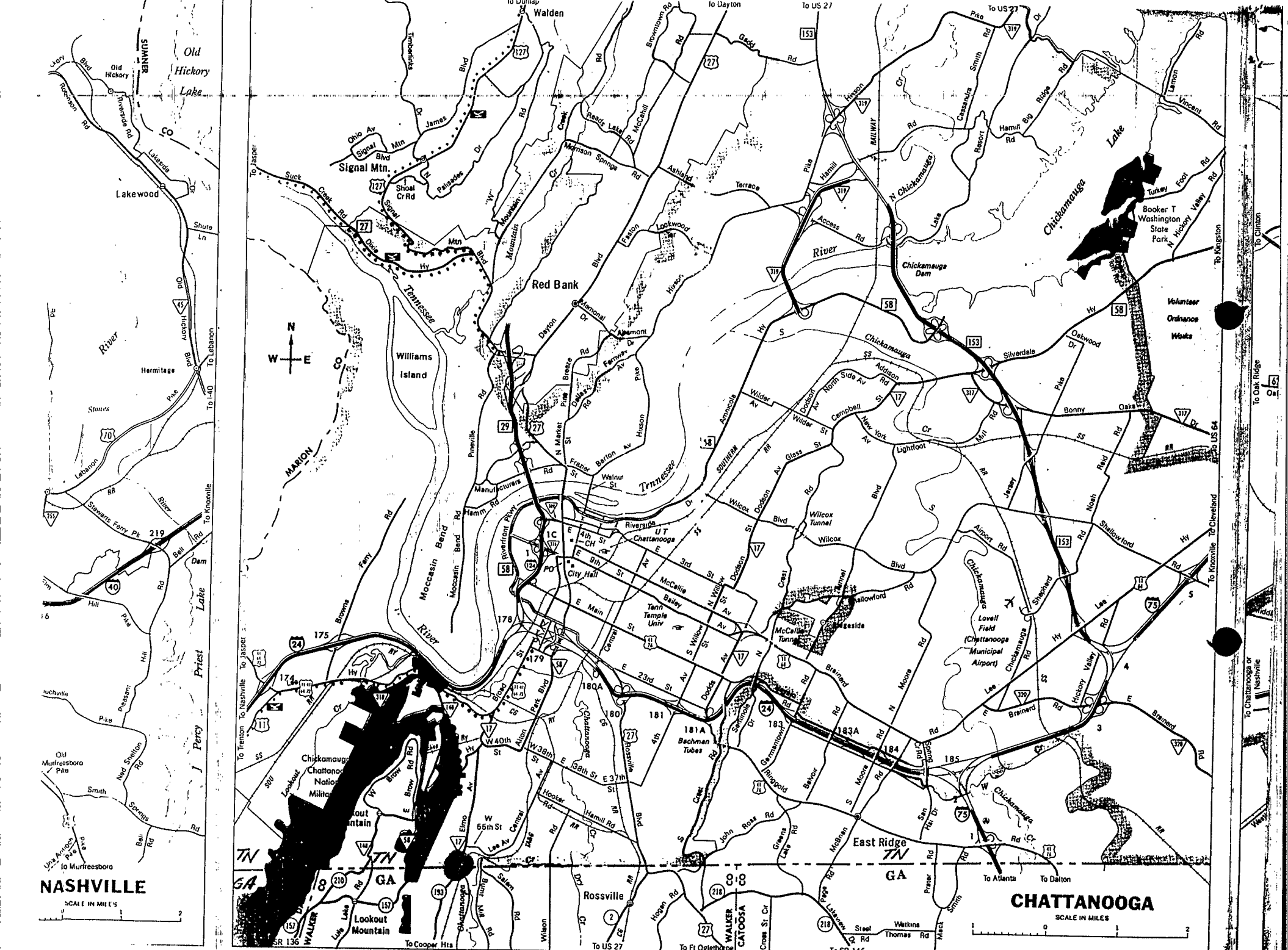
Facility straddles Georgia/Tennessee State line, the site of CERCLA concern is on the Georgia portion of the Southeast Terminal Inc property

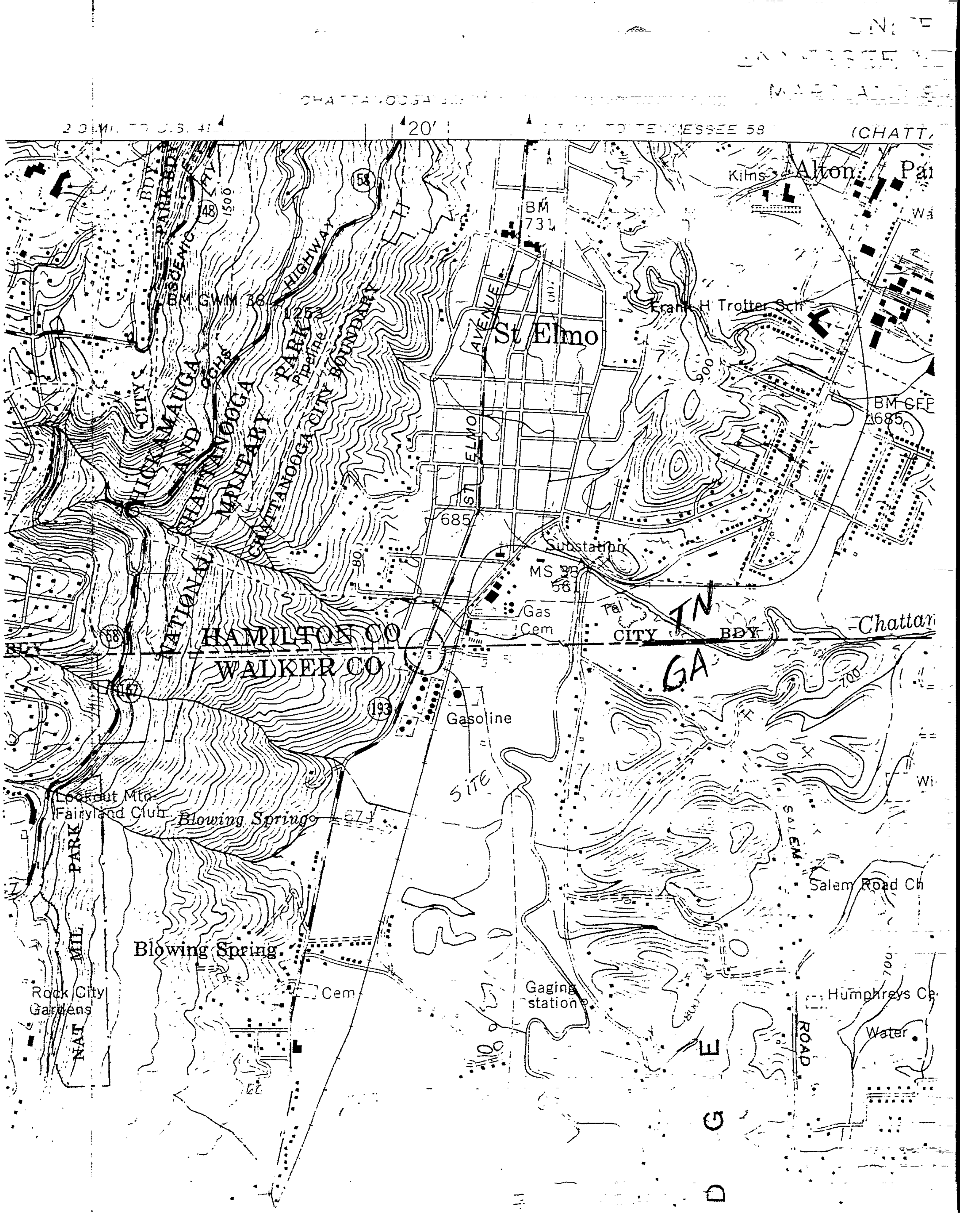
Part 2: Other site information

DATE SITE FIRST REPORTED: __ / __ / __ REPORTED BY: _____

REASON FOR LISTING: _____

Site was referred to EPA R4 by the State of Tennessee because the site was on the Georgia portion of the property and therefore out of their jurisdiction.


NASHVILLE
SCALE IN MILES
CHATTANOOGA
SCALE IN MILES
Old Hickory Lake
Lakewood
Hermitage
Stones River
Percy Priest Lake
Old Murfreesboro Pike
To Murfreesboro
To Lebanon
To Knoxville
To I-40
Signal Mtn.
Red Bank
Williams Island
Moccasin Bend
Tennessee River
Lookout Mountain
Rossville
East Ridge
Chickamauga Lake
Chickamauga Dam
Booker T Washington State Park
Volunteer Ordnance Works
Lovell Field (Chattanooga Municipal Airport)
McCallie Tunnel
Wilcox Tunnel
Bachman Tubes
UT Chattanooga
Tenn Temple Univ
City Hall
To Dalton
To Atlanta
To Cooper Hts
To US 27
To Ft Oglethorpe
To SR 146
To SR 136
To Trenton
To Nashville
To Jasper
To Dunlap
To Dayton
To US 27
To Cleveland
To Knoxville
To Clinton
To Kingston
To Oak Ridge
To Chattanooga or Nashville
TN
GA
WALKER
CATOOSA
SOUTHEAST TERMINAL INC SITE 5800 St Elmo Avenue


20'
(CHATT
Alton
Kilns
BM 731
St Elmo
AVENUE
ST ELMO
Frank H Trotter Sch
BM GWM 387
1253
HIGHWAY
SCENIC
CITY
PARK BDY
CHICKAMAUGA AND CHATTANOOGA NATIONAL MILITARY PARK
CHATTANOOGA CITY BOUNDARY
Pipeline
900
BM CEP 685
685
Substation
MS 33 561
Gas
Cem
HAMILTON CO
WALKER CO
CITY BDY
Chattan
TN
GA
Gasoline
SITE
Lookout Mtn Fairyland Club
Blowing Spring
Blowing Spring
SALEM
Salem Road Ch
Rock City Gardens
NAT MIL PARK
Cem
Gaging station
Humphreys Ce
Water
ROAD
700
E G D

PRELIMINARY ASSESSMENT COVER SHEET
SOUTHEAST TERMINAL
GAD981469281

DRAFT

I. History of The Site

Southeast Terminal is located on Georgia route 193, Flintstone, Georgia in Walker County. However, the facility's mailing address is 5800 St. Elmo Ave, Chattanooga, Tennessee. The site has been owned and operated by Union Oil Company and Gulf Oil Corperation since 1941. This facility is a bulk petroleum storage and distribution terminal. Petroleum products are shipped to the facility by pipeline and distributed via tanker truck. Surface run-off from the facility's loading area drains into an oil-water separator where light oils that collect on the surface are transfered into an underground storage tank. The light oils on the surface of this tank are pumped into the regular gasoline storage tank. Surface run-on is prevented from entering the product storage area by dikes. Precipitation falling inside the diked areas is discharged to a wooded area southeast of the facility through drains or pumps. Water accumulates inside the petroleum storage tanks. Because of the difference in density of water and the petroleum product water settles to the bottom of the storage tanks. Periodically the water is drawn off by discharging it through valves at the bottom of the tanks. The water, termed "water draw" by terminal [illegible] to the surface within the dikes. The facility is currently classified as a generator of hazardous waste. Gulf Oil's assets in the terminal were acquired by Chevron and later by BP Oil Company of Ohio. The terminal is operated by Union Oil Company of California.

II. Nature of Hazardous Materials

The hazardous wastes generated are leaded and unleaded tank bottom sludges. Various hydrocarbons including benzene, xylene, and toluene are expected to be constituents of the sludge.

III. Description of Hazardous Conditions, Incidents, Permit Violations

According to Mr. F. C. Mills, Environmental Supervisor of Union Oil Company of California, to his knoledge their have been no spills at the facility. Tank bottom sludges were disposed on-site at similar sites operated by Union Oil Company of California. This practice is expected to

also have occured on this site in the past.

IV. Routes of Contamination

Contaminants in the soil may leach and enter the ground water.

V. Possible Affected Population and Resources

The population within one mile of the site is 347; within two miles is 1388; and within three miles is 3,123.

VI. Recommendations and Justifications

Because of the possible contamination of ground water and the potential for use of ground water as a source for drinking water in the area, the site is assessed a "medium" priority for a site inspection.

VII. References to Supporting Data Sources

1. Union Oil Cpmpany of California, Notification of Hazardous Waste Activity, Southeastern Terminal, 5800 St. Elmo Avenue, Chattanooga, Tennessee.

2. Mills, Fred C., Environmental Supervisor, Union Oil Cpmpany of California, 13 Corperate Square N.E. Atlanta, Georgia 30302, Record of Telephonic Conversation with Charles P. Evans, Georgia Environmental Protection Division, September 21, 1987.

3. United States Geological Survey, Fort Oglethorpe, GA-TENN. quadrangle, scale 1:24,000, 1982.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D981469281

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
SOUTHEAST TERMINAL	5800 ST. ELMO AVE / GA SR 193

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
FLINTSTONE	GA	37409	WALKER	295	7

09 COORDINATES LATITUDE	LONGITUDE
34° 58' 55.4"	085° 30' 00.0"

10 DIRECTIONS TO SITE (Starting from nearest public road)
THE SITE IS LOCATED ON STATE ROUTE 193 SOUTH OF THE TENNESSEE - GEORGIA STATE LINE ON THE WEST SIDE of GA STATE ROUTE 193.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
UNION OIL COMPANY OF CALIFORNIA / BP OIL COMPANY	13 CORPORATE SQ. NE (PO BOX 4147)

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
ATLANTA	GA	30302	(404) 321-7600

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
SAME AS ABOVE	

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☐ YES DATE ___/___/___ (MONTH DAY YEAR)
☒ NO

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)	03 YEARS OF OPERATION		
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN	1941 (BEGINNING YEAR)	PRESENT (ENDING YEAR)	☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
SLUDGES CONTAINING LEAD AND VARIOUS HYDROCARBONS MAY HAVE BEEN DEPOSITED ON THE SITE.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
RESIDENTS OF THE AREA MAY USE GROUND WATER AS THEIR SOURCE of DRINKING WATER.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☒ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency, Organization)	03 TELEPHONE NUMBER
F. C. MILLS	UNION OIL COMPANY OF CALIFORNIA	(404) 321-7600

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
CHARLES P. EVANS	DNR	EPD	(404) 656-7404	10 / 8 / 87 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D981469281

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☒ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☐ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS UNKNOWN
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	UNKNOWN	N/A	N/A
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	UNKNOWN	NA	NA

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	UNKNOWN	999	UNKNOWN	UNKNOWN	NA
MES	LEAD	999	UNKNOWN	UNKNOWN	NA

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

GA EPD, SITE INVESTIGATION PROGRAM FILE " SOUTHEAST TERMINAL GAD981469281, CHATTANOOGA, TN

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D981469281

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
CONTAMINATION OF GROUND WATER IN THE VICINITY OF THE SITE IS POSSIBLE FROM PAST WASTE MANAGEMENT PRACTICES.

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
N/A

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
N/A

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
N/A

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
N/A

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: UNKNOWN (Acres) — 04 NARRATIVE DESCRIPTION
SOIL AROUND AND DOWNGRADIANT OF THE SITE MAY BE CONTAMINATED FROM PAST WASTE MANAGEMENT.

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 38 — 04 NARRATIVE DESCRIPTION
GROUND WATER MAY BE USED AS A SOURCE OF DRINKING WATER FOR SOME HOMES IN THE AREA OF THE SITE.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
N/A

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
N/A

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	0981469281

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

N/A

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: 1 mi = 347, 2 mi = 1388, 3 mi = 3123

IV. COMMENTS

NONE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

GA EPD, SITE INVESTIGATION PROGRAM FILE "SOUTHEAST TERMINAL GAD981469281, CHATTANOOGA, TN

EPA FORM 2070-12 (7-81)

RECORD OF TELEPHONIC CONVERSATION
Site Investigation Program

Routing: _____ Date: 9/21/87

_____ Time: 11:00 a.m./~~p.m.~~

File: SOUTHEASTERN TERMINAL

Party Spoken To: FRED C. MILLS Title: ENVIRONMENTAL SUPERVISOR

Agency/Company: UNION OIL COMPANY OF ~~CALORINIA~~ CALIFORNIA

Address: 13 CORPORATE SQUARE N.E. City: ATLANTA

Telephone Number: (404) 321 - 7600 State/Zip: GA 30302

Subject: PRELIMINARY ASSESSMENT OF FACILITY UNDER SUPERFUND

Summary of Call:

I DISCUSSED THE OPERATION AND PAST WASTE MANAGEMENT PRACTICES OF THE FACILITY WITH MR. MILLS. HE RELAYED THE FOLLOWING INFORMATION:

1. PETROLEUM PRODUCTS ARE SHIPPED TO THE SITE VIA PIPELINE AND DISTRIBUTED TO OTHER LOCATIONS.

2. FUELS HANDELED AT THE FACILITY INCLUDED LEADED GASOLINE. (OVER)

Actions Required: _____

Signature: _____

Follow-up Responses/Additional Comments: _____

Signature: _____ Date: _____

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3. The FACILITY has been in operation since about 1941. Sludge from the storage tanks are cleaned on an as needed basis, about every 5-10 years.

4. The amount of waste ~~generated~~ GENERATED from a typical tank cleaning ranges from 3,500 to 3,150 gallons. The waste weighs about 7 pounds / gallon.

5. MR. MILLS has no knoledge of how the waste sludge was disposed in the past nor of any spills at the FACILITY.

6. According to MR. MILLS surface run-off from the FACILITY is collected in an oil-water separator. The light petroleum fraction of the run-off water is pumped into an underground storage tank. The light oils on the surface of this tank are normally transfered to a tank of regular gasoline.

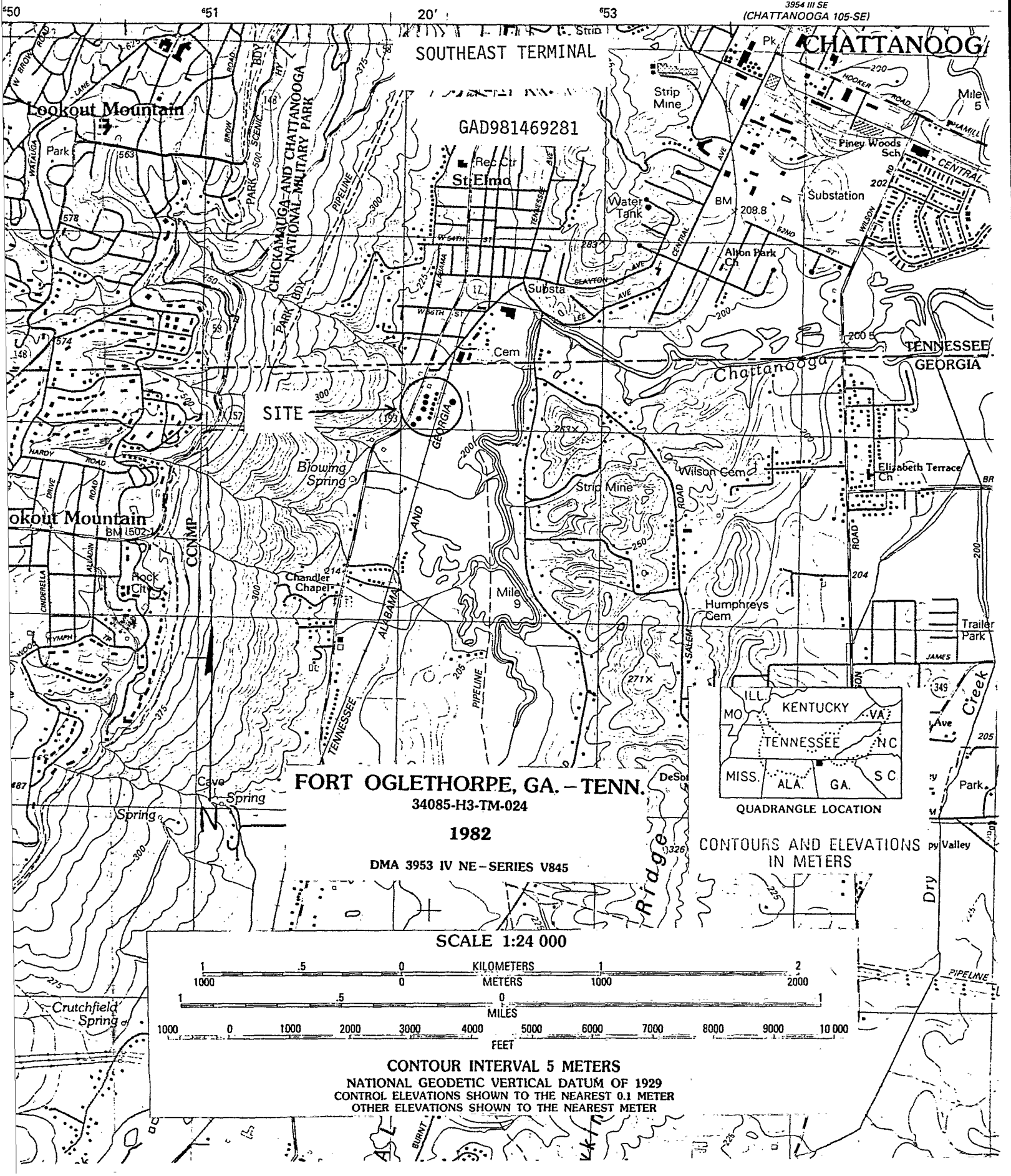
7. According to MR. MILLS the FACILITY is now classified as a generator of hazardous waste.

8. The FACILITY is jointly owned by UNION OIL COMPANY of CALIFORNIA AND BP OIL COMPANY. The site is operated by UNION OIL COMPANY of CALIFORNIA.

OR

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
GEORGIA GEOLOGIC SURVEY

3954 III SE
(CHATTANOOGA 105-SE)



FORT OGLETHORPE, GA.–TENN.

34085-H3-TM-024

1982

DMA 3953 IV NE–SERIES V845

QUADRANGLE LOCATION

CONTOURS AND ELEVATIONS IN METERS

SCALE 1:24 000

1 .5 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 .5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000
FEET

CONTOUR INTERVAL 5 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
CONTROL ELEVATIONS SHOWN TO THE NEAREST 0.1 METER
OTHER ELEVATIONS SHOWN TO THE NEAREST METER

U.S. ENVIRONMENTAL PROTECTION AGENCY

EPA NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law *(Section 3010 of the Resource Conservation and Recovery Act)*.

INSTALLATION'S EPA I.D. NO.

I. NAME OF INSTALLATION

II. INSTALLATION MAILING ADDRESS

III. LOCATION OF INSTALLATION

RECEIVED

PLEASE PLACE LABEL IN THIS SPACE

DEC 12 1985

ENVIRONMENTAL PROTECTION
LAND PROTECTION BRANCH

DETACH

FOR OFFICIAL USE ONLY

COMMENTS

C

INSTALLATION'S EPA I.D. NUMBER: F G A D 9 8 1 4 6 9 2 8 1 (T/A/C: T)

APPROVED

DATE RECEIVED (yr., mo., & day)

I. NAME OF INSTALLATION

SOUTHEAST TERMINAL

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX

3 5800 ST. ELMO AVENUE

Walker

CITY OR TOWN | ST. | ZIP CODE

4 CHATTANOOGA | TN | 37409

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER

5 STATE ROUTE 193

CITY OR TOWN | ST. | ZIP CODE

5 WALKER COUNTY | GA |

IV. INSTALLATION CONTACT

NAME AND TITLE (last, first, & job title) | PHONE NO. (area code & no.)

2 JENSEN E. H. TERMINAL MANAGER | 404-820-0826

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER

8 UNION OIL COMPANY - BP OIL INC

B. TYPE OF OWNERSHIP (enter the appropriate letter into box): M

F = FEDERAL
M = NON-FEDERAL

VI. TYPE OF HAZARDOUS WASTE ACTIVITY (enter "X" in the appropriate box(es))

- [X] A. GENERATION
- [ ] B. TRANSPORTATION (complete item VII)
- [ ] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION (transporters only – enter "X" in the appropriate box(es))

- [ ] A. AIR
- [ ] B. RAIL
- [ ] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER (specify):

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA I.D. Number in the space provided below.

C. INSTALLATION'S EPA I.D. NO.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION (complete item C)

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

IX. DESCRIPTION OF HAZARDOUS WASTES (continued from front)

A. HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous waste from non-specific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
7	8	9	10	11	12

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four-digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48

D. LISTED INFECTIOUS WASTES. Enter the four-digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54

E. CHARACTERISTICS OF NON-LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non-listed hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 – 261.24)*

55. 1. IGNITABLE (D001)	56. 2. CORROSIVE (D002)	57. 3. REACTIVE (D003)	58. 4. TOXIC (D004)
[X]	[ ]	[ ]	[X]

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

59. SIGNATURE	60. NAME & OFFICIAL TITLE (type or print)	61. DATE SIGNED
F. C. Mills	F. C. Mills Environmental Supervisor Union Oil Company of California	12/9/85

EPA Form 8700-12 (6-85) REVERSE

Union 76 Division: Western Region
Union Oil Company of California
13 Corporate Square, N.E.
P.O. Box 4147, Atlanta, Georgia 30302
Telephone (404) 321-7600

union 76

W.E. Herchline
Division Distribution Manager, Atlanta

Atlanta, Georgia
December 9, 1985

Mr. Jack Dempsey
Georgia Department of Natural Resources
Hazardous Waste Management Program
Environmental Protection Division
Generator Compliance Unit
270 Washington Street, S.W.
Atlanta, Georgia 30334

RE: Southeast Terminals - EPA I.D. Numbers

Dear Mr. Dempsey:

Wish to refer you to Ms. Gail Mueller's (B.P. Oil Company, Inc.) letter to your department dated November 25, 1985, concerning the subject terminals which are joint owned by Union Oil Company of California and B.P. Oil, Inc.

As you noted, we have a Tennessee E.P.A. I.D. number for our Southeast Terminal located at Lookout Mountain, Georgia. This terminal has a Tennessee mailing address, but is located physically in Georgia.

We are attaching our Notification of Hazardous Waste Activity form and request that a Georgia E.P.A. I.D. number be issued.

Your assistance in this matter is appreciated.

Very truly yours,

F. C. Mills

F. C. Mills
Environmental Supervisor

FCM:ea

cc: Gail Mueller - B.P. Oil, Inc.
E. H. Jensen - w/attachment
R. E. Van Deusen